

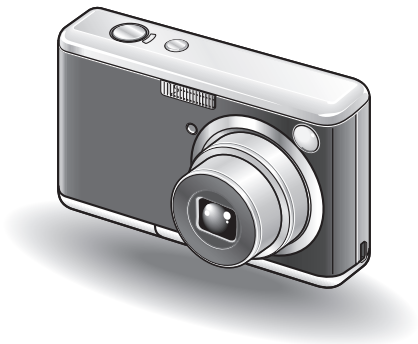


## INSTRUCTION MANUAL

# VPC-S6

### Digital Camera

**Xacti**



#### **Important note**

This manual explains how to safely operate the VPC-S6.

Please read these instructions carefully before using the camera.  
Make sure to read and understand the separate booklet "SAFETY MANUAL".  
Keep this manual in a safe place for later reference.



## Warning

TO PREVENT THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE

## FOR AMERICAN USERS

The following advisory is included in accordance with the laws of the State of California (USA):

### WARNING:

This product contains chemicals, including lead, known to the State of California to cause cancer, birth defects or other reproductive harm. **Wash hands after handling.**

- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - Reorient or relocate the receiving antenna.
  - Increase the separation between the equipment and receiver.
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### Declaration of Conformity

Model number: VPC-S6

Trade Name: SANYO

Responsible party: SANYO FISHER COMPANY

Address: 21605 Plummer Street, Chatsworth, California 91311

Telephone No.: (818) 998-7322

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.



## FOR CANADIAN USERS

- This Class B digital apparatus complies with Canadian ICES-003.

## FOR EU USERS



### Note:

- This symbol mark and recycle system apply only to EU countries and do not apply to countries in other areas of the world.

Your SANYO product is designed and manufactured with high quality materials and components which can be recycled and reused.

This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste.

Please dispose of this equipment at your local community waste collection/recycling centre.

In the European Union there are separate collection systems for used electrical and electronic products.

Please help us to conserve the environment we live in!

## Symbols used in this manual

- HINT** Points giving some extended instructions or special points to pay attention to.
- CAUTION** Points that require special attention.
- (page xx)** Refer to the page indicated for detailed information.

You may find the answers to questions or problems concerning camera operation in the sections "COMMONLY ASKED QUESTIONS" (page 128) and "TROUBLESHOOTING" (page 134).



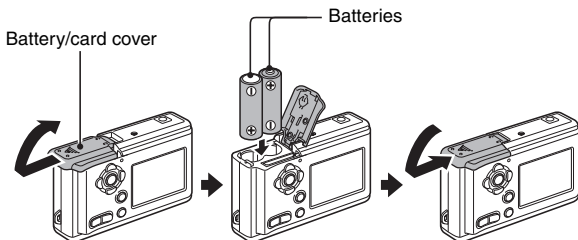
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# GETTING UP AND RUNNING

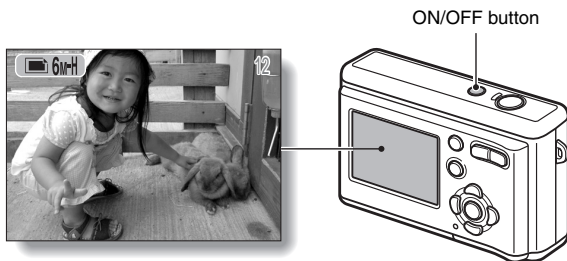
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## Install the battery

- 1** Open the battery/card cover, and insert the batteries.
- The battery/card cover is located on the bottom of the camera.



- 2** Press the ON/OFF button to turn the camera on.
- The Still Image Shooting Screen appears.

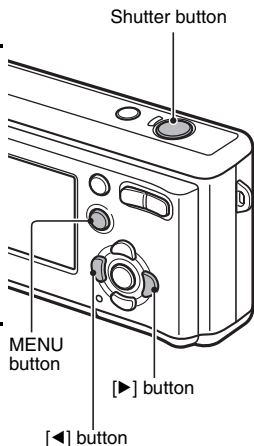




## Shooting

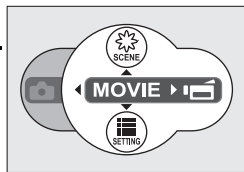
### ■ Still image photography

- 1 Press the shutter button.**
  - The image is captured.



### ■ Video clip recording

- 1 Press the MENU button, and press the [>] button.**
  - The camera changes to the video clip recording mode.
- 2 Press the MENU button.**
- 3 Press the shutter button.**
  - Recording begins.
  - To stop recording, press the shutter button again.
  - Press the MENU button, press the [<] button, and press the MENU button. The camera changes to the still image shooting mode.



#### CAUTION

**This camera does not record sound.**

- For video clip playback, only video data is played back.



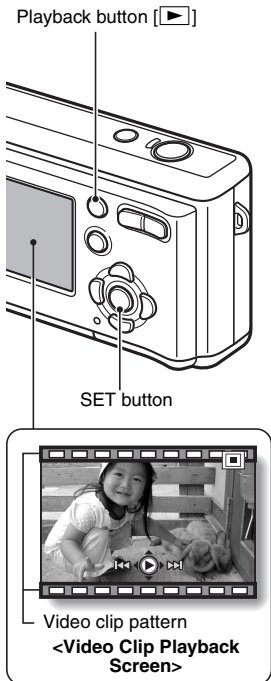
## Playback

### ■ Still image playback

- 1 Press the playback button [▶].
  - The display switches to the Playback Screen.
  - To view other images, press the [◀] or [▶] button.
  - If the playback button [▶] is pressed, the display returns to the Shooting Screen.

### ■ Video clip playback

- 1 Press the playback button [▶].
  - The display switches to the Playback Screen.
  - Press the [◀] or [▶] button to display the video clip you wish to play back.
  - Video clips are indicated by a video clip pattern along the top and bottom of the screen.
- 2 Press the SET button.
  - Playback of the selected video clip begins.
  - If the playback button [▶] is pressed again, the display changes to the Shooting Screen.



## When you are finished taking pictures...

Press the ON/OFF button to turn the camera off.



# QUICK SEARCH BY OPERATION

Your camera has an abundance of convenient features and functions. From creating precisely the photo you want, to viewing images using various techniques, you can locate the exact operation for your purposes in the following table.

	Basic operation	Convenient functions	Additional functions
Shooting/recording	<b>Getting started shooting</b> <ul style="list-style-type: none"> <li>• “Recording a video clip” on page 32</li> <li>• “Shooting single shots” on page 27</li> <li>• “Shooting sequential shots” on page 64</li> </ul>	<b>Shoot sequential shots with changing brightness</b> <ul style="list-style-type: none"> <li>• “How to use the auto bracket shots (bracket series) feature” on page 65</li> </ul> <b>Log the date and time of your photos</b> <ul style="list-style-type: none"> <li>• “DATE AND TIME SETTING” on page 19</li> </ul> <b>Zoom in on the subject</b> <ul style="list-style-type: none"> <li>• “USING THE ZOOM” on page 36</li> </ul> <b>Close-up photography</b> <ul style="list-style-type: none"> <li>• “FOCUS RANGE” (macro mode) on page 59</li> </ul>	<b>For more accurate focus</b> <ul style="list-style-type: none"> <li>• “FOCUS RANGE” (manual focus) on page 60</li> </ul> <b>Set the focus to a narrow range</b> <ul style="list-style-type: none"> <li>• “FOCUS AREA SETTING” on page 68</li> </ul> <b>Check the focus status</b> <ul style="list-style-type: none"> <li>• “ZOOM JUMP PLAYBACK” on page 82</li> </ul>
	<b>Optimize the photo quality</b> <ul style="list-style-type: none"> <li>• “RESOLUTION SETTING” on page 58</li> </ul>	<b>Reduce video clip flicker</b> <ul style="list-style-type: none"> <li>• “FLICKER-REDUCTION SETTING” on page 73</li> </ul>	
	<b>Capture fast-moving subjects</b> <ul style="list-style-type: none"> <li>• “SCENE SELECT” (sports mode) on page 42</li> </ul>		



	Basic operation	Convenient functions	Additional functions
Shooting/recording	<b>Shoot in bright conditions</b> <ul style="list-style-type: none"><li>• “EXPOSURE CORRECTION” on page 39</li><li>• “FLASH SETTING” on page 37</li><li>• “SCENE SELECT” (night view mode) on page 42</li></ul>		
		<b>Increase the camera’s sensitivity</b> “ISO SENSITIVITY” on page 70	
	<b>Photographing people</b> <ul style="list-style-type: none"><li>• “SCENE SELECT” (portrait mode/night view mode) on page 42</li><li>• “SHUTTER OPERATION SETTING” (ID photos) on page 67</li><li>• “FILTERS” (cosmetic filter) on page 45</li><li>• “FLASH SETTING” (red-eye reduction) on page 37</li></ul>		
	<b>Photographing landscapes</b> <ul style="list-style-type: none"><li>• “SCENE SELECT” (landscape mode) on page 42</li><li>• “FOCUS RANGE” (infinity mode) on page 59</li></ul>		
	<b>Take a self-photo</b> <ul style="list-style-type: none"><li>• “SELF-TIMER” on page 61</li></ul>		
		<b>Make images lighter or darker</b> <ul style="list-style-type: none"><li>• “EXPOSURE CORRECTION” on page 39</li></ul>	<b>Measure the brightness of a specific area</b> <ul style="list-style-type: none"><li>• “LIGHT-MEASURING MODE SETTING” on page 69</li></ul> <b>Adjust the camera’s sensitivity</b> <ul style="list-style-type: none"><li>• “ISO SENSITIVITY” on page 70</li></ul>
		<b>Change the color of the images</b> <ul style="list-style-type: none"><li>• “FILTERS” (monochrome filter/sepia filter) on page 45</li></ul>	<b>Make white appear natural</b> <ul style="list-style-type: none"><li>• “WHITE BALANCE” on page 71</li></ul>



	Basic operation	Convenient functions	Additional functions
Playback	<b>Getting started viewing images</b> <ul style="list-style-type: none"><li>• “Playing back the video clip” on page 33</li></ul>		
	<ul style="list-style-type: none"><li>• “Viewing still images” on page 29</li></ul>	<b>Search for image data</b> <ul style="list-style-type: none"><li>• “9-image display playback” on page 30</li></ul> <b>Magnify an image</b> <ul style="list-style-type: none"><li>• “Magnifying (zooming in) the image” on page 31</li></ul>	<b>Check the focus status</b> <ul style="list-style-type: none"><li>• “ZOOM JUMP PLAYBACK” on page 82</li></ul> <b>Change the angle of view</b> <ul style="list-style-type: none"><li>• “ROTATE IMAGE” on page 84</li></ul>
	<b>Slideshow playback</b> <ul style="list-style-type: none"><li>• “SLIDESHOW PLAYBACK” on page 95</li></ul>		
	<b>Adjust the LCD monitor brightness</b> <ul style="list-style-type: none"><li>• “LCD MONITOR BRIGHTNESS” on page 106</li></ul>		
Data managing/processing	<b>Search for image data</b> <ul style="list-style-type: none"><li>• “9-image display playback” on page 30</li></ul>		
	<b>Delete data</b> <ul style="list-style-type: none"><li>• “ERASING DATA” on page 80</li></ul>	<b>Protect images from accidental erasure</b> <ul style="list-style-type: none"><li>• “IMAGE PROTECT” on page 78</li></ul> <b>Format a card</b> <ul style="list-style-type: none"><li>• “INITIALIZING THE CARD MEMORY AND INTERNAL MEMORY” on page 113</li></ul>	
	<b>Specify the number of prints, index print, and date imprint</b> <ul style="list-style-type: none"><li>• “PRINT SETTINGS” on page 88</li></ul>		
	<b>View the settings that were in effect when the image/audio data was recorded</b> <ul style="list-style-type: none"><li>• “DISPLAYING IMAGE PROPERTIES (INFORMATION SCREEN)” on page 97</li></ul>		



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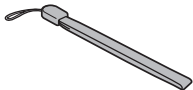


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# CHECKING THE INCLUDED ACCESSORIES

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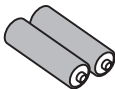
- Handstrap: 1



- SANYO Software Pack (CD-ROM): 1



- AA alkaline batteries: 2  
(batteries made exclusively to be used as included accessories)



- Dedicated USB interface cable: 1



- “SAFETY MANUAL”  
(safety precautions booklet)  
Please read this booklet carefully before using the digital camera.

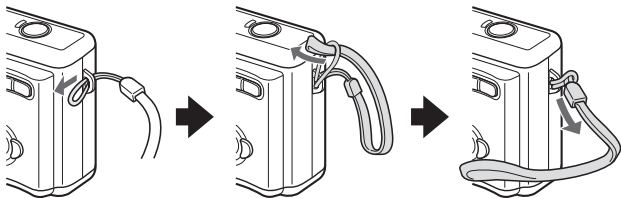


- Quick Guide





## Attaching the handstrap



## Media cards that can be used with this camera

The types of card that can be inserted into and used with this camera are:

- SD Memory Card
- Multi Media Card

## What “card” means in this manual

- In this manual, SD Memory Cards and Multi Media Cards that can be used in this digital camera are referred to as “card”.
- The cards in the illustrations in this manual are SD Memory Cards, but all installation, removal, and formatting procedures are the same for both SD Memory Cards and Multi Media Cards.



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# GETTING THE MOST OUT OF YOUR CAMERA

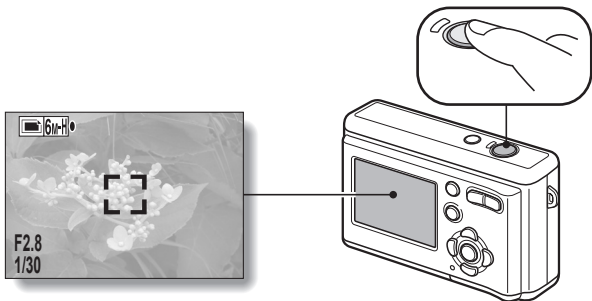
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Your camera can take still photos and record video clips.

It's loaded with lots of functions that are possible only in a digital camera, including a super-quick focus, an easy-to-understand guidance display on a large screen, a more extensive Scene Select feature, and more.

## **You'll never miss a photo opportunity, thanks to the quick focus: Touch focus (see page 22)**

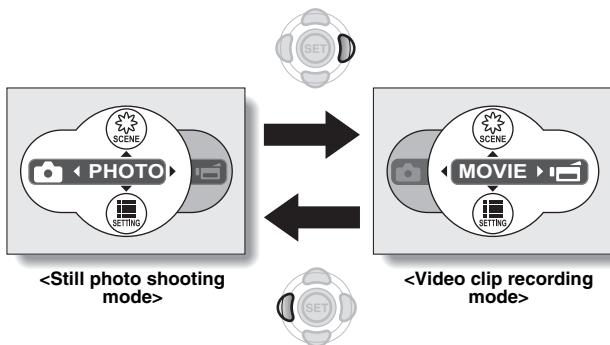
Just touch the shutter button lightly, and the touch sensor automatically focuses the image (touch focus).





## Mode Select Screen

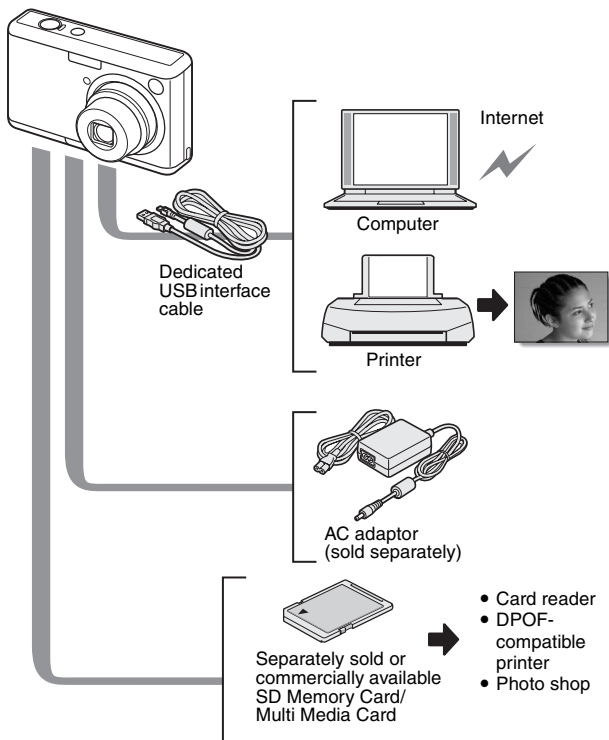
Switch between the still photo shooting and video clip recording modes with a single on-screen action. Accessing the Shooting Setting Screen has never been so fast.





# SYSTEM MAP

The included accessories can be used to connect your camera to a computer or printer. By connecting the camera to your computer, you can, for example, copy your photos to the computer's hard disk. You can connect it to a printer for direct printing of your photos. Or take the card to a photo shop to have your photos printed there.



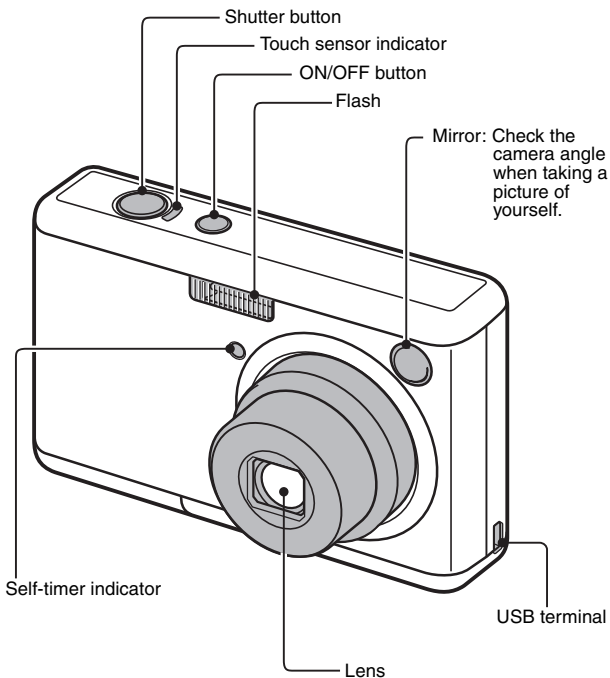


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# PARTS NAMES

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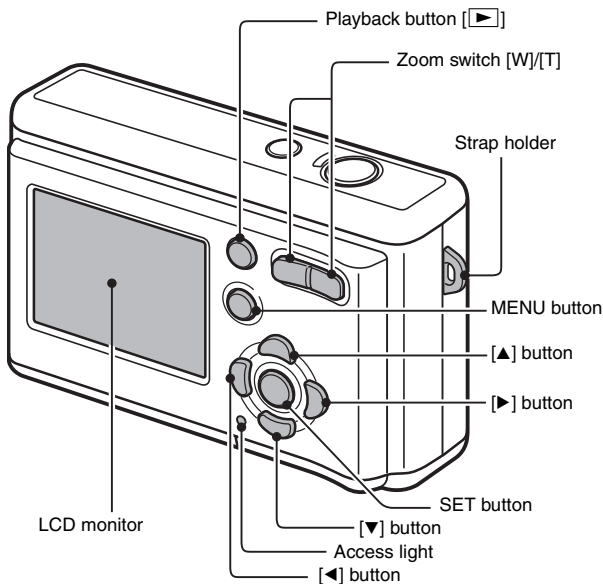
## Front



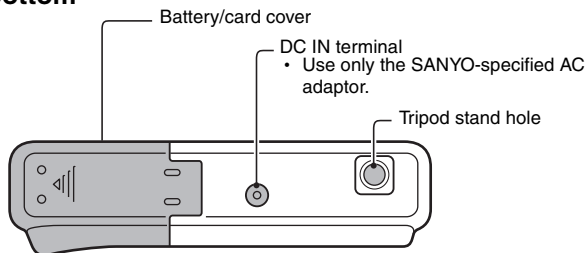


## PARTS NAMES

### Rear



### Bottom





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# INSTALLING THE CARD AND BATTERIES

---

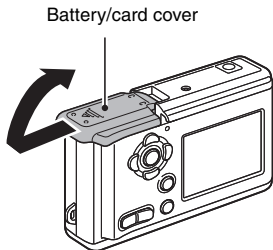
Your camera has an internal 15MB memory, when means that you can take photos (record image data) even when no card is installed. By using a card, however, you will be able to take many more photos.

The card can be used after it has been formatted with the camera (page 113).

---

## 1 Open the battery/card cover.

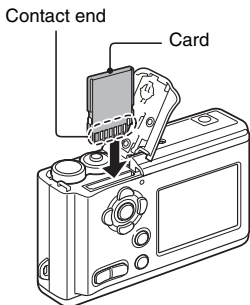
- While gently pressing the battery/card cover, slide it open.



---

## 2 Insert the card.

- Firmly insert the card until it clicks into place.





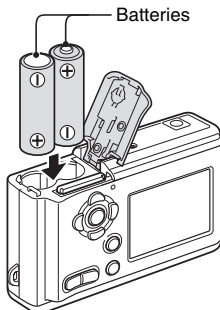
---

## INSTALLING THE CARD AND BATTERIES

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### 3 Insert the batteries.

- Make sure that the batteries' polarities (+ and -) are correct.

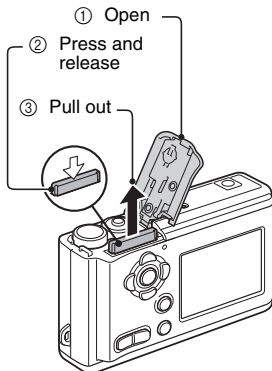


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### 4 Close the battery/card cover.

#### When removing the card...

- To remove the card, press it down, and then release. The card will protrude slightly, and you can then pull it out.





---

## CAUTION

### Be careful when removing the card.

- Do not attempt to forcibly remove the card.
- Never remove the card when the access light is flashing quickly. In doing so, you risk losing the data stored in the card.

### Manganese batteries cannot be used.

- Not only do manganese batteries have a short battery life, but there is the danger of their overheating and causing damage to the digital camera.

### Other batteries

- If you wish to use batteries other than the alkaline batteries (LR6), we recommend the following.
  - AA-size nickel metal hydride (NiMH) batteries (SANYO HR-3UF) × 2
  - AA-size Ni-Cd batteries (SANYO N-3UV) × 2

When installing the batteries, make sure that they are oriented correctly.


### Do not open the battery/card cover when the camera is turned on.

- If the battery/card cover is opened while the power is on, important data may be lost. Sanyo Electric shall not be held responsible for any losses that result from failure to comply with this warning.

---

## HINT

### Shooting without a card installed

- The camera has a 15MB internal memory that lets you photograph and play back images even when there is no card installed. When the camera is turned on with no card installed, the internal memory icon  is shown on the LCD monitor to let you know that the images you capture will be saved to the camera's internal memory.

### About the internal backup battery

- This camera's internal battery serves to maintain the date and time settings, as well as the shooting settings. The backup battery will be fully charged when the batteries are kept in the camera continuously for about 2 days. In the fully charged state, the backup battery will maintain the camera settings for about 7 days.

### When not using the camera for a long time, remove the batteries.

- A small amount of power is still used even if the camera is turned off, and it is therefore recommended that the batteries be removed from the camera if it is not going to be used for a long time. Note that when the batteries are removed for a long period, the time and date settings may be cleared. Before using your camera again, be sure to confirm that the camera settings are correct.



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# TURNING THE CAMERA ON AND OFF

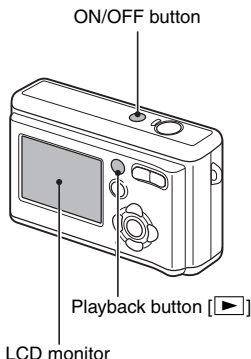
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## Turning on the camera

### In the shooting mode

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- 1 **Press the ON/OFF button.**
  - The camera turns on.
  - The camera turns on in the shooting mode that was active before it was last turned off.



### In the playback mode

---

- 1 **Press the playback button [▶] for at least one second.**
  - The Playback Screen appears on the LCD monitor (page 29).

## Turning off the camera

- 1 **Press the ON/OFF button.**
  - The camera turns off.


**<If the camera was turned on by pressing the playback button [▶]>**

  - When the playback button [▶] or ON/OFF button is pressed, the camera turns off.



## Turning on the camera when the power save (sleep) function is active


In order to preserve battery power, the power save (sleep) function will automatically turn off the camera after one minute of no use during shooting, or five minutes of no use during playback (factory-preset setting).

- When the power save function is active, you can restore the power by any of the following methods:
  - Press the playback button [].
  - Press the SET or MENU button.
  - Press the shutter button.
  - Press the ON/OFF button.
- When the AC adaptor (sold separately) is connected, the power save function will become active about 10 minutes after the camera is turned on (factory-preset setting).
- The user can specify the time elapsed before the power save function is activated (page 108).
- When the camera is connected to a computer or printer using the dedicated USB interface cable, the power save function is disabled, and the camera turns off after about 12 hours.

---

### HINT

If the  icon appears...

- When a picture is taken, the date and time it was captured is recorded with it. When the date and time cannot be recorded with the image because the date and time have not yet been set (page 19), the  icon appears. To have the date and time recorded with images, please make this setting before capturing images.



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# DATE AND TIME SETTING

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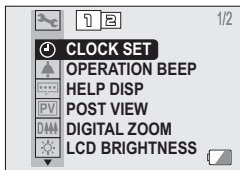
The camera will record the date and time an image is captured so that you can display them during playback. Therefore, before capturing images, make sure the correct date and time are set.


Example: To set the clock to 7:30 p.m. on December 24, 2005

- 
- 1** Press the **ON/OFF** button to turn the camera on, and press the **MENU** button.
- 

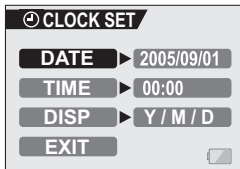
- 2** Press the **[▼]** button.
- The Shooting Setting Screen appears (page 47).
- 

- 3** Display the Option Screen (page 98).



- 
- 4** Press the **[▲]** or **[▼]** button to select the clock set icon , and press the **SET** button.

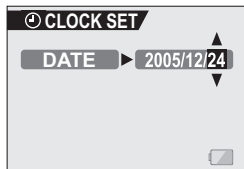
- The Clock Set Screen appears.
- The current date and time settings are shown.
- Follow the procedures below to enable or disable the date display during playback, to set the display format for the date, and to set the date and time.
- To return to the Option Screen, press the **MENU** button, or select "EXIT" and press the **SET** button.





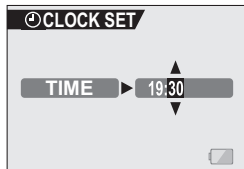
## 5 Set the date.

- ① Select "DATE".
- ② Press the SET button.
  - The Set Date Screen appears.
- ③ Set the date to "2005/12/24".
  - The date is set in the following order: Set the year → Set the month → Set the day.
  - Press the [◀] or [▶] button to select the year, month or day. Press the [▲] or [▼] button to increase or decrease the number.
- ④ Press the SET button.



## 6 Set the time.

- ① Select "TIME".
- ② Press the SET button.
  - The Set Time Screen appears.
- ③ Set the time to "19:30".
  - The time is set in the following order: Set the hour → Set the minute.
  - A 24-hour clock is used for the time display.
- ④ Press the SET button.

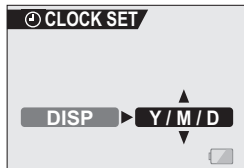


## 7 Set the order in which the date is displayed during playback.

- ① Select "DISP".
- ② Press the SET button.
  - The Set Date Format Screen appears.
- ③ Press the [▲] or [▼] button.
  - Press the [▲] button to change the displayed date order as follows:

→ year/month/day → month/day/year → day/month/year → DISP OFF (no display)

Press the [▼] button to change it in the reverse order.





---

## DATE AND TIME SETTING

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- If “DISP OFF” is selected, the date the image was captured is not shown during playback.
- ④ Press the SET button.

---

### **8** Select “EXIT”, and press the SET button.

- The date and time setting is completed, and you are returned to the Option Screen.
- To return to the Shooting Screen, press the MENU button.

---

### HINT

- Under normal conditions, while the batteries are being replaced, an internal battery will maintain the date and time settings. However, there is a small chance the settings may be lost. (The backup will last for about 7 days.) It is recommended to check that the date and time settings are still correct after replacing the batteries and before shooting or recording of any type (follow steps 1 and 4).

### **To correct the date and time settings**

- After steps 1 and 4, select the line of the setting that you want to change, press the SET button, and follow the steps in the respective paragraphs above to change the setting.



---

# BEFORE TAKING PICTURES

---

## How to hold the camera

Hold the camera securely, keeping your elbows close to your body and making sure the camera is stable.

Correct hold



Incorrect hold



A finger is blocking the lens or flash.

Make sure that the lens and flash are not blocked by your fingers or the handstrap.

---

### HINT

- Images captured in the still image shooting mode can be rotated when they are played back (page 84).
- When the optical zoom is used or when the autofocus is operating, the image may appear to waver, but this is not a malfunction.

## About the touch sensor (touch focus)

With the touch sensor, the image is focused simply by a light finger-touch on the shutter button (focus lock). With the subject in focus, just gently press the shutter button to take the picture for a perfectly focused image.

At the same time, the touch sensor is temporarily deactivated whenever the Mode Select Screen (page 25) or Shooting Setting Screen (page 47) is displayed, thereby facilitating operation of these screens.

Furthermore, you can also deactivate the touch sensor so that the autofocus operates only when you press the shutter button halfway (page 57).



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## BEFORE TAKING PICTURES

---

### Using the autofocus

The autofocus will work in almost all situations; however, there are certain conditions that may cause the autofocus function to not work properly. If the autofocus function is not working properly, set the focus range to capture images (page 59).

#### ■ Conditions that may cause incorrect focus

The following examples are some of the situations where the autofocus function may not work.

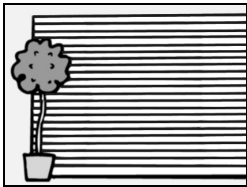
- **Subjects with low contrast, very bright subjects at the center of the image or dark subjects or locations**

Use the focus-lock function to lock the focus on an object with contrast at the same distance as the desired subject.



- **Subjects without vertical lines**

Use the focus-lock function to lock the focus on the subject while holding the camera vertically.





The following examples are some of the situations where the autofocus function may work, but not as desired.

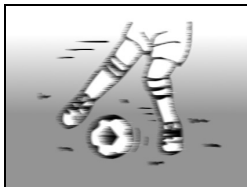
- **When both near and far objects are present**

Use the focus-lock function to lock the focus on an object at the same distance as the desired subject, then reposition the camera to compose the picture.



- **Fast-moving subjects**

Use the focus-lock function to lock the focus on an object at the same distance as the desired subject, then reposition the camera to compose the picture.





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## BEFORE TAKING PICTURES

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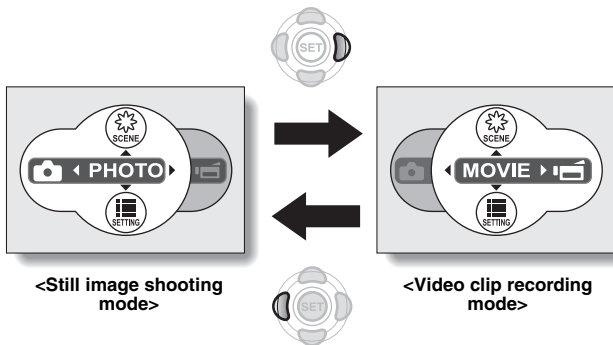
### How to switch the shooting mode

Your camera can both capture still photos (still image shooting mode) and record video clips (video clip recording mode). When shooting, you can switch the shooting mode on the Mode Select Screen.

- 
- 1** Press the **ON/OFF** button to turn the camera on, and press the **MENU** button.

- The Mode Select Screen appears.

- 
- 2** Press the [**◀**] or [**▶**] button.
- The shooting mode is switched.



- 
- 3** Press the **MENU** button.
- The display changes to the Shooting Screen.



## Hints for taking pictures

### Muting the operation sounds

- The operation sounds that are generated, for example, when the shutter button, MENU button or SET button is pressed, can be muted (page 101).

### Where is the image data saved?

- All the image and sound data is recorded in the camera's internal memory or on the card installed in the camera.
- When a card is installed in the camera, the data is recorded on the card. If no card is installed, the data is recorded in the camera's internal memory.

### Taking pictures in backlight conditions...

- When taking pictures with the light coming from behind the subject, due to the characteristics of the CCD, light lines or ghost patterns (flare phenomenon) may appear in the captured image. In this situation, it is recommended that you avoid taking pictures with the subject lit from behind.

### While the image data is being recorded...

- While the access light is flashing quickly, the image data is being written to the memory, during which time it is not possible to capture another image. Another image can be captured after the access light turns off. However, even when the access light is flashing, depending on the camera's internal memory remaining capacity, in some cases the next image can be captured about 2 seconds after shooting.



# CAPTURING AND PLAYING BACK STILL IMAGES

There are two modes for capturing still images. In the normal still image mode, one image is captured each time the shutter button is pressed. In the sequential shots mode, when you press the shutter button, several successive images are captured. For more information about taking sequential shots, please see page 64.

## Shooting single shots

- 1 Press the ON/OFF button to turn the camera on.**

- The Still Image Shooting Screen appears.

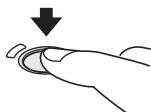
- 2 Rest your finger on the shutter button.**

- If the touch sensor (page 57) has been set to ON, when the shutter button is touched, the autofocus operates and the image is focused (focus lock).



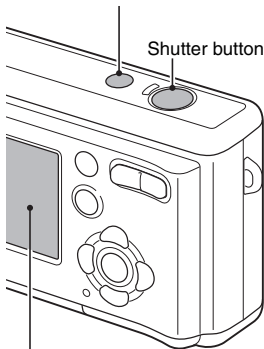
**<If the touch sensor is set to OFF>**

- Engage the autofocus by pressing the shutter button halfway.



ON/OFF button

Shutter button

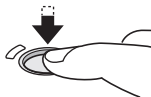


**<Still Image Shooting Screen>**



### 3 Gently press the shutter button.

- Press the shutter button gently, taking care not to move the camera.
- The image that was captured appears on the LCD monitor as long as the shutter button is kept pressed (post view).




### 4 Release your finger from the shutter button.

- The captured image is recorded.

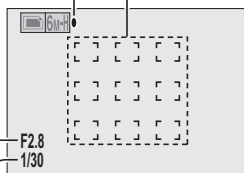
#### HINT

##### What is the camera focusing on?

- A target mark  on the LCD monitor shows the area the camera is focusing on.
- The camera automatically determines the correct focus by measuring from 9 different focus points within the shooting area. If the target mark is at a position that is different from the point you wish to focus on, you can refocus, for example, by changing the shooting angle.
- The large target mark appears when the camera focuses on a wide area in the center of the screen.

Focus indicator

Target mark



Shutter speed

Aperture

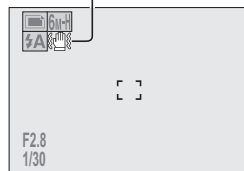
##### About the focus indicator

- A green focus indicator appears when the subject is successfully focused, or a red focus indicator when the camera was not able to focus the subject.


##### The shutter speed and aperture are displayed

- When the camera focuses and the target mark appears, at the same time, the shutter speed and aperture settings are also displayed. You can use them as a reference when shooting.

Motion alert icon



##### If the motion alert icon appears...

- During still image shooting, if the shutter speed is slow and the possibility that the image may be blurred due to camera shake becomes high, the motion alert icon may appear on the LCD monitor. In this case, use a tripod to stabilize the camera when shooting, or set the flash operation mode to automatic (page 37).
- When shooting with the scene select function set to the fireworks  mode, the motion alert icon always appears, but this is normal.



## CAPTURING AND PLAYING BACK STILL IMAGES

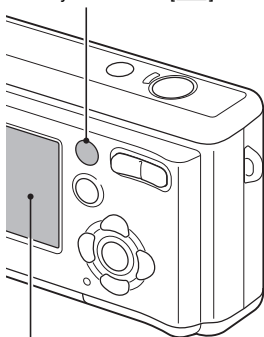
### Viewing still images

The steps for viewing both single shots and sequential shots are the same.

#### 5 Press the playback button [▶].

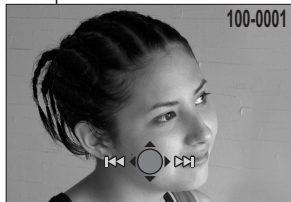
- If the playback button [▶] was pressed to turn the camera on, however, press the playback button [▶] for at least 1 second.
- The image most recently captured appears on the LCD monitor.

Playback button [▶]



#### 6 View other images.

- Press the [◀] or [▶] button to display the previous or next image.  
To display the previous image:  
Press [◀].  
To display the next image:  
Press [▶].
- To return to Shooting Screen, press the playback button [▶]. (However, if the camera was turned on by pressing the playback button [▶], the camera will turn off.)




### When you are finished viewing images...


- Press the ON/OFF button to turn the camera off.

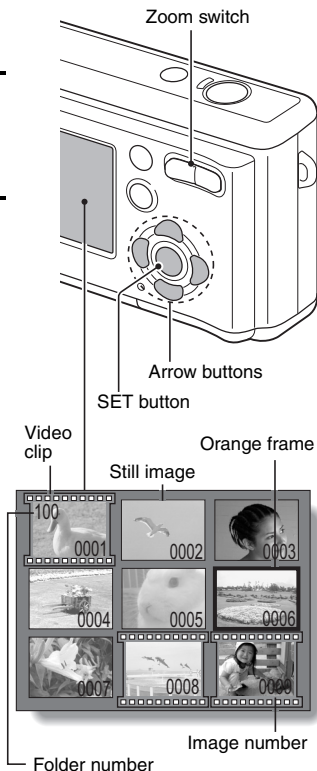


## 9-image display playback

- 1 Press the playback button  
[▶].

- 2 Press [W] ([) on the zoom switch.
  - The 9-image display appears.

- 3 Select the image to play back.
  - Press the arrow buttons to move the orange frame to the desired image, and press the SET button.
  - Instead of pressing the SET button, you can press [T] ([) on the zoom switch to show the image full screen.





---


## CAPTURING AND PLAYING BACK STILL IMAGES

---

### Magnifying (zooming in) the image


---

**1** Display the image that you want to magnify.


**2** Press [T] ([]) on the zoom switch.

- Magnification is enabled.
- The image is magnified, and the central portion of image is displayed.
- Press the arrow buttons to view different parts of the magnified image.

To magnify:

Magnification increases with each press of [T] ([]) on the zoom switch.

To return to normal size:

Magnification decreases with each press of [W] ([]) on the zoom switch.

- Press the SET button to return to the normal (100%) view.



---

#### HINT

**The magnified portion of the image can be saved as a separate image.**

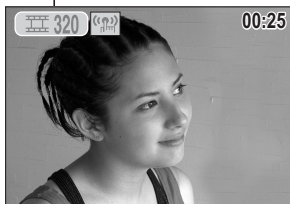
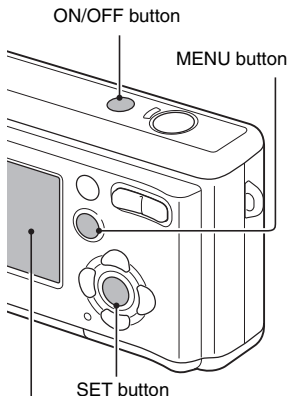
- Press the shutter button. The magnified portion is saved as a new still image.



# VIDEO CLIP RECORDING AND PLAYBACK

## Recording a video clip

- 1 Press the ON/OFF button to turn the camera on.**
- 2 Press the MENU button.**
  - The Mode Select Screen appears.
- 3 Press the [▶] button to select "MOVIE", and press the MENU button.**
  - The Video Clip Recording Screen appears.
- 4 Press the shutter button.**
  - Video clip recording begins. During recording, the recording time is shown on the LCD monitor.
  - It is not necessary to continue pressing the shutter button while shooting.
- 5 End the recording.**
  - Press the shutter button again to stop recording and save the video clip.



### CAUTION

- This camera records video signals only; it does not record sound.



## VIDEO CLIP RECORDING AND PLAYBACK

### Playing back the video clip

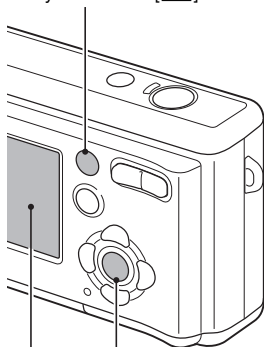
#### 6 Press the playback button [▶].

- If the playback button [▶] was pressed to turn the camera on, however, press the playback button [▶] for at least 1 second.
- The video clip just recorded appears on the LCD monitor.
- Video clips are indicated by a video clip pattern along the top and bottom of the screen.

#### 7 Press the SET button.

- Video clip playback begins.
- To stop playback, press the SET button again.

Playback button [▶]



SET button



Video clip pattern



## Outline of playback operation

To do this...		Do this
Pause		During playback, press the SET button.
To play back one image at a time (single-frame step)	During forward playback	While playback is paused, press the [▶] button.
	During reverse playback	While playback is paused, press the [◀] button.
Slow playback	During forward playback	While playback is paused, press and hold the [▶] button.
	During reverse playback	While playback is paused, press and hold the [◀] button.
To accelerate playback	Forward playback	During forward playback, press the [▶] button. * The playback speed changes each time the [▶] button is pressed, as follows: Normal playback → 2x → 5x → 10x Press the [◀] button to resume normal playback speed.
	Reverse playback	During forward playback, press the [◀] button. * The playback speed changes each time the [◀] button is pressed, as follows: 10x ← 5x Press the [▶] button to resume normal playback speed.
Return to normal playback speed		Press the SET button.

## When you are finished viewing video clips...

- Press the ON/OFF button to turn the camera off.



---

## VIDEO CLIP RECORDING AND PLAYBACK

---

### HINT

#### **Adjusting the LCD monitor brightness**

- While the Shooting Screen is active, you can quickly access the screen for adjusting the brightness of the LCD monitor by pressing the MENU button for at least 1 second.

#### **Display the video clip playback point**

- During video clip playback, press the MENU button for at least 1 second to display a bar showing the current playback point in the video clip.
- Press the MENU button for about 1 second to cancel the bar.

#### **To play back data from the internal memory**

- Remove the card from the camera.

---

### CAUTION

#### **If no audio is heard...**

- Audio cannot be played back.

#### **The data for a video clip is very large.**

- Therefore, be aware that if the video clip is uploaded to a computer to be played back, the computer may not be able to play back the video fast enough, making it appear jerky. (The video will always be displayed properly on the LCD monitor.)

#### **When the remaining card memory becomes 10 percent or less of the total card capacity...**

- The remaining memory icon appears on the LCD monitor.
- Depending on the card, shooting may end even before the possible shooting time indicated.



# USING THE ZOOM

Your camera has two zoom functions: optical zoom and digital zoom. You can specify whether or not the digital zoom is enabled (page 105).

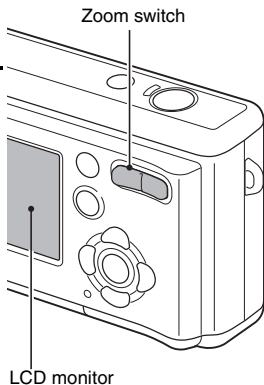
- 1 Point the camera lens at the subject.

- 2 Press the zoom switch to compose the desired image.

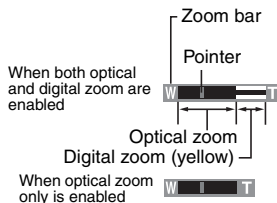
[T]: Zoom in on the subject.

[W]: Zoom out.

- When the zoom switch is pressed, the zoom bar appears on the LCD monitor.
- When the optical zoom factor is at maximum, zooming stops temporarily. When [T] on the zoom switch is pressed again, the mode changes to the digital zoom mode and zooming continues.



- 3 Take the picture.





# FLASH SETTING

The flash is used not only for taking pictures where there is insufficient light, but also when the subject is in shade or in backlight conditions. Your camera's flash has four modes of operation (automatic flash mode, forced flash mode, flash off mode and red-eye reduction mode). Select the flash mode that is appropriate for the surrounding conditions. The flash can be enabled only when taking single-shot still images.

## 1 Display the Still Image Shooting Screen (page 27).

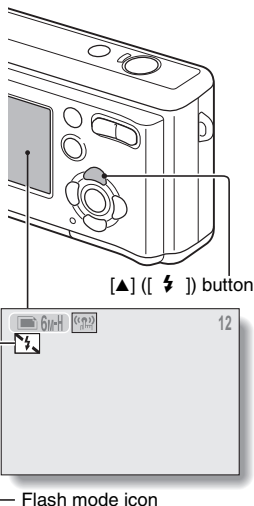
## 2 Press the **[▲] ([⚡])** button.

- The flash setting changes.
- The flash setting appears on the LCD monitor.
- The flash setting can also be changed from the Shooting Screen (page 50).

No flash indication:

The camera will detect the subject brightness and use the flash only when required. In a backlight situation, if only the center of the image is very dark, the flash will operate to compensate (auto flash).


- [⚡]**: The flash will operate with every image captured regardless of the conditions. Use this setting under backlight conditions, when the subject is in shade, under fluorescent lighting conditions, etc. (forced flash).
- [⚡]**: The flash will not operate even in dark situations. Use this setting when capturing an image in a location where flash photography is prohibited, or when shooting a night landscape scene (flash off).
- [⚡]**: The digital camera will detect the subject brightness and use the flash only when required. At this time the flash will operate in a manner that reduces the red reflection ("red-eye") in the subject's eyes (red-eye reduction).





---

### **3 Press the [▲] ([ ]) button to set the flash mode.**

- Each time the [▲] ([  ]) button is pressed, the flash mode changes.
- Display the icon for the desired flash mode.

---


### **4 Press the shutter button.**

- The picture is snapped and the flash operates according to the selected mode.

---

#### **HINT**

##### **In the automatic flash mode...**

- In the automatic flash mode, when the subject is in focus, a  icon appearing on the LCD monitor indicates that the flash will operate.



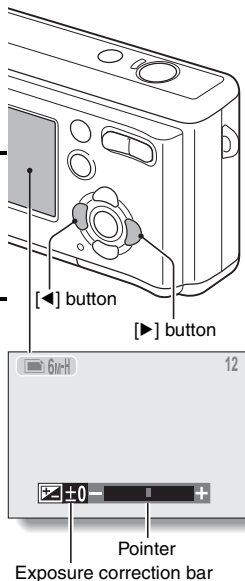
# EXPOSURE CORRECTION

When capturing images, you can make the image lighter or darker.

- 1 Point the camera lens at the subject.**
  - If the Mode Select Screen or a menu screen (Shooting Setting Screen) is active, press the MENU button to exit it.

- 2 With the Shooting Setting Screen not showing, press the [▶] ( [ ] ) button.**
  - The exposure correction bar appears.

- 3 Press the [◀] or [▶] button to adjust the exposure.**
  - The exposure setting numerical value is shown at the left end of the exposure bar. The exposure can be set to a value from -1.8EV to +1.8EV.
  - To cancel the exposure correction bar, press the MENU button.
  - The exposure correction setting can also be accessed from the Shooting Setting Screen (page 52).



## HINT

**The exposure correction setting is canceled in the following cases:**

- When the pointer is set to the center position.
- When the Option Screen is accessed.
- When the playback button [▶] is pressed.
- After the power is turned off.



# EASY SETTINGS SCREEN

With the Easy Settings Screen, it's a cinch to get beautiful photos every time, simply by selecting the setting that matches your shooting conditions.

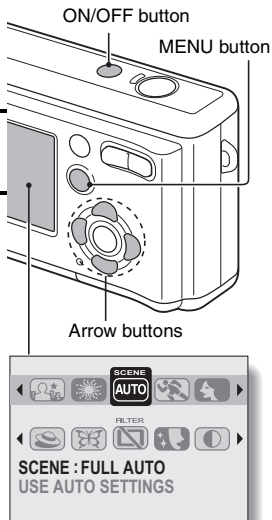
- 1 Press the ON/OFF button to turn the camera on, and press the MENU button.**

- The Mode Select Screen appears.

- 2 Press the [◀] or [▶] button to select the desired shooting mode.**

- 3 Press the [▲] button.**

- The Easy Settings Screen appears.
- Press the [▲] or [▼] button to choose either the scene select menu or the filter menu.

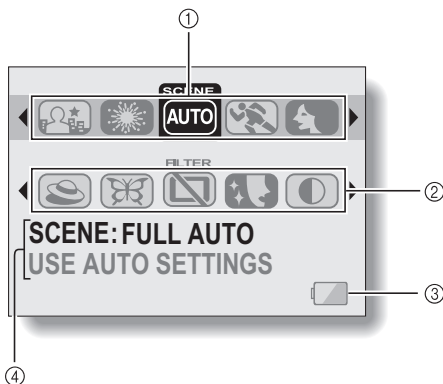


## To exit the Easy Settings Screen

Press the MENU button to return to the Mode Select Screen. Press the MENU button again to return to the Shooting Screen.



# OVERVIEW OF THE EASY SETTINGS SCREEN



## ① Scene select menu (page 42)

- : Full auto photography
- : Sports photography
- : Portrait photography
- : Landscape photography
- : Night view photography  
(Available only when shooting single shots)
- : Fireworks photography  
(Available only when shooting single shots)

## ② Filter menu (page 45)

- : No filter
- : Cosmetic filter
- : Monochrome filter
- : Sepia filter
- : Sharpness filter
- : Contrast filter
- : Color filter

## ③ Remaining battery power (page 117)

## ④ HELP display (page 103)



---

# SCENE SELECT







---

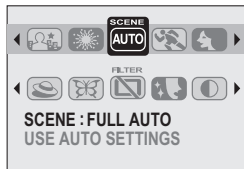
You can select from various preset settings (aperture, shutter speed, etc.) for specific shooting conditions.

---

## 1 Display the Easy Settings Screen (page 40).

## 2 Select the scene select menu.

-  **AUTO**: The camera automatically makes the optimum settings suitable for the surrounding conditions (full auto).
-  Capture a split-second image of a fast-moving subject (sports mode).
-  Enhance the 3D feeling of the subject by blurring the background (portrait mode).
-  For beautiful shots of distant scenery (landscape mode).
-  Photograph the subject while keeping the background night scenery (night view mode).
-  For capturing fireworks at night (fireworks mode).





---

## SCENE SELECT

---

### **3** Select the desired icon from the scene select menu, and press the SET button.


- This completes the scene select setting.

---

### **4** Take the picture.

For video clip recording, see page 32.












For still image shooting, see page 27.

- To return to normal photography, select  from the scene select menu, and press the SET button.



## Scene select and operation mode




The scene select functions that are available depend on the active operation mode (page 63).

	Operation mode		
	Single shots  Composite photo 	Sequential shots  Auto bracket shot 	ID photo 
Full auto 	O	O	O
Sports 	O	O	—
Portrait 	O	O	O
Landscape 	O	O	—
Night view 	O	—	—
Fireworks 	O	—	—

O: Available

—: Not available

### CAUTION

- When capturing images using the fireworks  or night view  setting, use a tripod or other method to stabilize the camera.
- A table showing the limitations for settings corresponding to scene select icons other than  is on page 139.



---

# FILTERS








---

The filter feature changes image characteristics such as color tones, to apply unique effects to the photographed image.

---

## 1 Display the Easy Settings Screen (page 40).

## 2 Select the filter menu.

- : No filter is used (none).
- : Skin tones are enhanced in close-up shots (cosmetic filter).
- : Snap black-and-white photos (monochrome filter).
- : Create a sepia-tone photo (sepia filter).
- : Accentuates the outlines in the image (sharpness filter).
- : Accentuates the light and dark areas in the image (contrast filter).
- : Accentuates the colors in the image (color filter).





---

### **3** Select the desired icon from the filter menu, and press the SET button.


- This completes the filter setting.

---

### **4** Take the picture.


For video clip recording, see page 32.

For still image shooting, see page 27.

- To return to normal photography, select  from the filter menu, and press the SET button.

---

#### **HINT**

- A table showing the limitations for settings corresponding to filter icons other than  is on page 139.



---

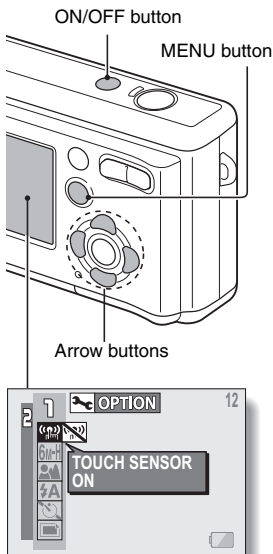
# ACCESSING THE SHOOTING SETTING SCREEN

---

The Shooting Setting Screen is used to adjust the focus range and self-timer settings; to select the single-shot, sequential shots, composite photo, or ID photo operation mode; and to manage various settings such as turning the shutter button touch sensor ON/OFF.

---

- 1** Press the **ON/OFF** button to turn the camera on, and press the **MENU** button.
  - The Mode Select Screen appears.
- 2** Press the [**◀**] or [**▶**] button to select the desired shooting mode.
- 3** Press the [**▼**] button.



## To cancel the Shooting Setting Screen

Press the **MENU** button once to return to the Mode Select Screen. Press the **MENU** button again to return to the Shooting Screen.



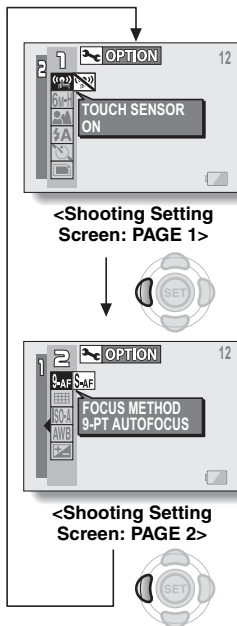
## Switching the page

The Shooting Setting Screen consists of two pages: **PAGE 1** and **PAGE 2**.

### 1 Display the Shooting Setting Screen.

### 2 Press the [◀] button.

- The Shooting Setting Screen PAGE changes.
- Each time the [◀] button pressed, the PAGE changes.

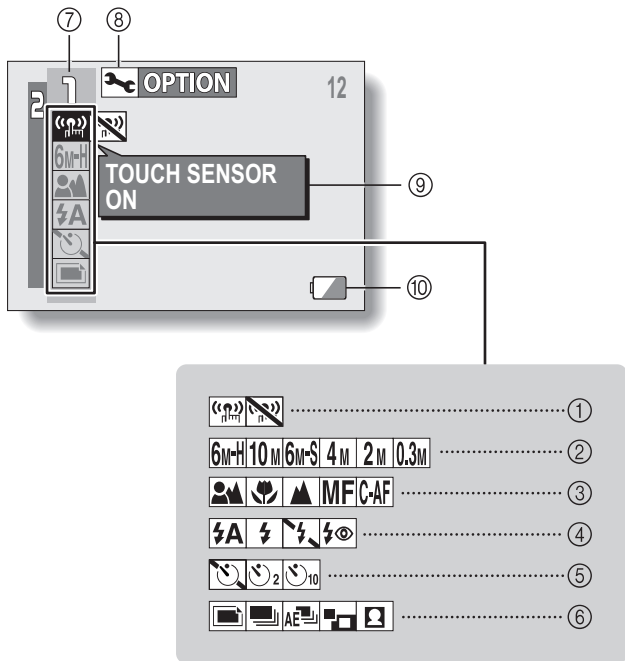




## ACCESSING THE SHOOTING SETTING SCREEN


### Overview of the Shooting Setting Screen (still images)


#### PAGE 1







① **Touch sensor menu (page 57)**


: Set the shutter button touch sensor to ON.


: Set the shutter button touch sensor to OFF.


② **Resolution menu (page 58)**


: Shoot at 2,816 × 2,112 pixels, low compression

: Shoot at 3,680 × 2,760 resolution

: Shoot at 2,816 × 2,112 pixels, standard compression


: Shoot at 2,288 × 1,712 resolution

: Shoot at 1,600 × 1,200 resolution


: Shoot at 640 × 480 resolution

③ **Focus range menu (page 59)**

: Shoot using the autofocus.

: Close-up photography

: Distant focus

: Manual focus

: Continuous AF

④ **Flash menu (page 37)**

: Automatic flash mode


: Forced flash mode


: Flash off mode

: Red-eye reduction


⑤ **Self-timer menu (page 61)**


: Self-timer off


: Shooting begins 2 seconds after the shutter button is pressed.


: Shooting begins 10 seconds after the shutter button is pressed.

⑥ **Operation mode menu (page 63)**

: Shoot single images.

: Shoot sequential images.

: Successive still images are captured as the exposure changes.

: Create a composite photo.

: Create ID photos.

⑦ **PAGE display (page 48)**

⑧ **Option icon (page 98)**

- Displays the Option Screen.

⑨ **Help display (page 103)**

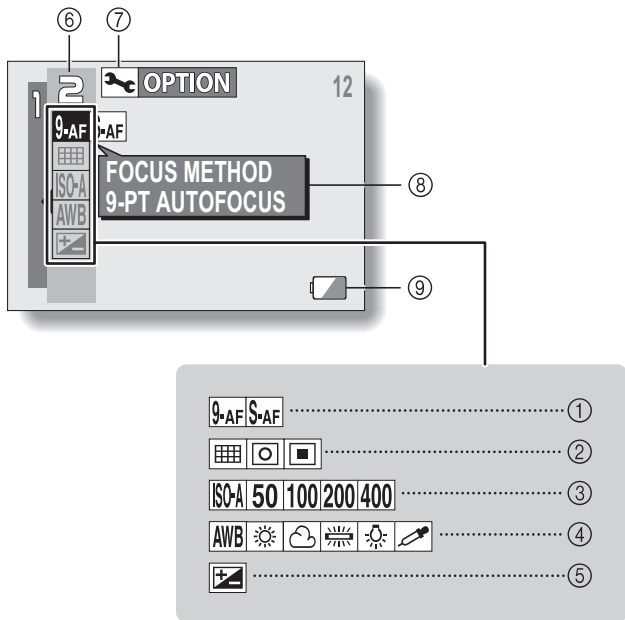
⑩ **Remaining battery power (page 117)**

- When you specify multiple functions that cannot be simultaneously enabled, the function which was last set becomes the active setting, and the other settings accordingly change automatically.



# ACCESSING THE SHOOTING SETTING SCREEN


## PAGE 2







① **Focus mode menu (page 68)**


 **9-*AF***: 9-point focus mode

 **S-*AF***: Spot focus mode


② **Light-measuring mode (EXP MEASURE) menu (page 69)**

: Multi-section light-measuring setting

: Center-weighted light-measuring setting

: Spot light-measuring setting

③ **ISO sensitivity menu (page 70)**

 **ISO-A**: Sets the ISO sensitivity automatically (corresponds to ISO50 to 200).


 **50**: Corresponds to ISO50


 **100**: Corresponds to ISO100


 **200**: Corresponds to ISO200

 **400**: Corresponds to ISO400


④ **White balance menu (page 71)**


 **AWB**: The camera will determine the setting automatically.

: For photography in fair weather (sunny) conditions

: In overcast conditions

: Under fluorescent lighting

: Under incandescent lighting

: For setting the most accurate white balance

⑤ **Exposure correction icon (page 39)**

- Change the brightness of the image.

⑥ **PAGE display (page 48)**

⑦ **Option icon (page 98)**

- Displays the Option Screen.

⑧ **Help display (page 103)**

⑨ **Remaining battery power (page 117)**

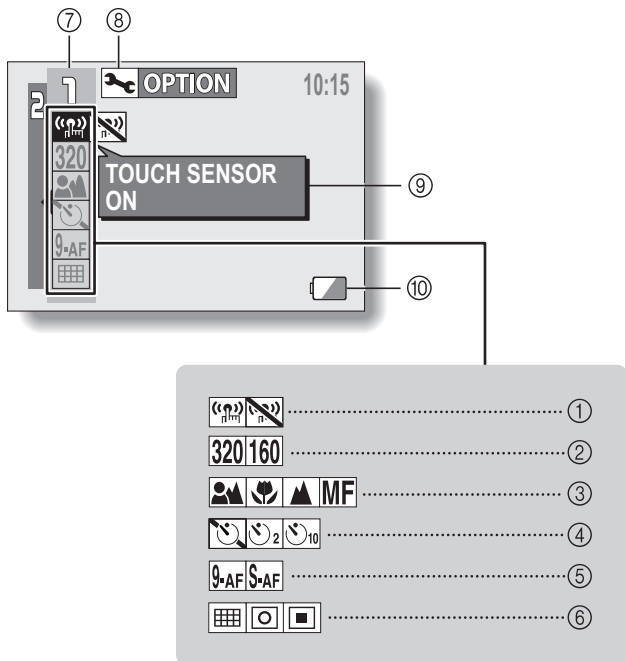
- When you specify multiple functions that cannot be simultaneously enabled, the function which was last set becomes the active setting, and the other settings accordingly change automatically.



## ACCESSING THE SHOOTING SETTING SCREEN


### Overview of the Shooting Setting Screen (video clips)


#### PAGE 1







① **Touch sensor menu (page 57)**

: Set the shutter button touch sensor to ON.

: Set the shutter button touch sensor to OFF.


② **Video clip mode menu (page 58)**

: Shoot at 320 × 240 pixels (15 frames/second, standard compression)

: Shoot at 160 × 120 pixels (15 frames/second, standard compression)

③ **Focus range menu (page 59)**

: Shoot using the autofocus.


: Close-up photography


: Distant focus

: Manual focus

④ **Self-timer menu (page 61)**


: Self-timer off

: Shooting begins 2 seconds after the shutter button is pressed.


: Shooting begins 10 seconds after the shutter button is pressed.


⑤ **Focus mode menu (page 68)**


: 9-point focus mode

: Spot focus mode

⑥ **Light-measuring mode (EXP MEASURE) menu (page 69)**

: Multi-section light-measuring setting

: Center-weighted light-measuring setting

: Spot light-measuring setting

⑦ **PAGE display (page 48)**

⑧ **Option icon (page 98)**

- Displays the Option Screen.

⑨ **Help display (page 103)**

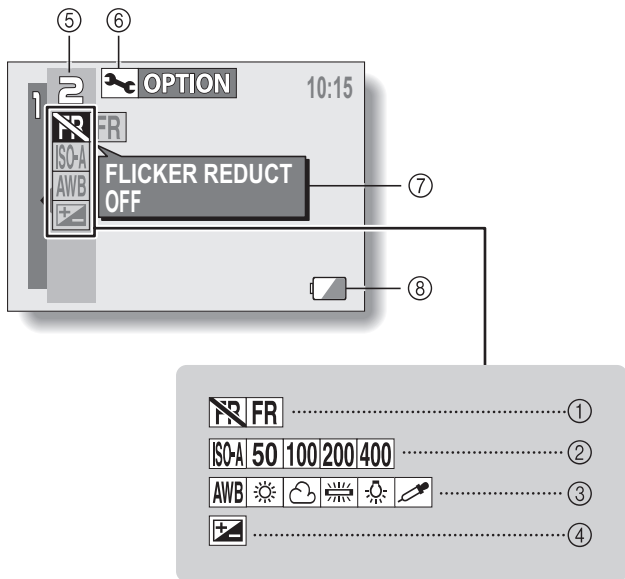
⑩ **Remaining battery power (page 117)**

- When you specify multiple functions that cannot be simultaneously enabled, the function which was last set becomes the active setting, and the other settings accordingly change automatically.




# ACCESSING THE SHOOTING SETTING SCREEN


## PAGE 2






① **Flicker-reduction menu (page 73)**


: Set the flicker-reduction function to OFF.

: Set the flicker-reduction function to ON.

② **ISO sensitivity menu (page 70)**

: Sets the ISO sensitivity automatically (corresponds to ISO100 to 400).


: Corresponds to ISO100


: Corresponds to ISO200

: Corresponds to ISO400

: Corresponds to ISO800


③ **White balance menu (page 71)**


: White balance is automatically adjusted depending on ambient lighting

: For photography in fair weather (sunny) conditions

: In overcast conditions

: Under fluorescent lighting

: Under incandescent lighting

: For setting the most accurate white balance

④ **Exposure correction icon (page 39)**

- Change the brightness of the image.

⑤ **PAGE display (page 48)**

⑥ **Option icon (page 98)**

- Displays the Option Screen.

⑦ **Help display (page 103)**

⑧ **Remaining battery power (page 117)**

- When you specify multiple functions that cannot be simultaneously enabled, the function which was last set becomes the active setting, and the other settings accordingly change automatically.



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# TOUCH SENSOR (TOUCH FOCUS) SETTING

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The touch sensor function, by which the autofocus is activated by a finger-touch on the shutter button, can be set to ON or OFF. When the touch sensor function is set to OFF, the autofocus is activated when you press the shutter button halfway; then gently press the shutter button to snap the picture.


---

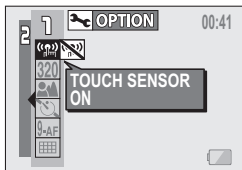
**1** Display **PAGE 1** of the Shooting Setting Screen (page 47).

**2** Select the touch sensor menu.

- The sensor menu appears.

: The touch sensor function is set to ON.

: The touch sensor function is set to OFF.



**3** Select the desired icon, and press the **SET** button.

- The selected touch sensor function is set.

---

## CAUTION

- When the camera is attached to a tripod, the touch sensor sensibility may be diminished. This happens because the touch sensor works by detecting changes in the capacitance when the camera is touched with bare hands. The touch sensor sensibility will also be diminished, for example, if you hold the camera with gloved hands.
- When the camera is used near inverter-type fluorescent lights, the touch sensor sensitivity may be diminished.



---

# RESOLUTION SETTING

---

By setting the image resolution (pixels) to a higher setting, image detail is enhanced for a smoother, finer picture. However, the file size also becomes large and uses more memory. Select the resolution setting that suits your purpose.

---

## 1 Display PAGE 1 of the Shooting Setting Screen (page 47).

## 2 In the still image shooting mode, select the resolution menu; in the video clip recording mode, select the video clip mode menu.

- The resolution menu or video clip mode menu appears.

### <Still image shooting mode>

- 6M-H**: Shoot image at 2,816 × 2,112 resolution (low compression)
- 10M**: Shoot image at 3,680 × 2,760 resolution
- 6M-S**: Shoot image at 2,816 × 2,112 resolution (standard compression)
- 4M**: Shoot image at 2,288 × 1,712 resolution
- 2M**: Shoot image at 1,600 × 1,200 resolution
- 0.3M**: Shoot image at 640 × 480 resolution

### <Video clip recording mode>

- 320**: Shoot at 320 × 240 pixels (15 frames/second, standard compression)
- 160**: Shoot at 160 × 120 pixels (15 frames/second, standard compression)



<Example: Still image shooting mode>

## 3 Select the desired icon, and press the SET button.

- The selected resolution setting or video clip mode setting is set.



---




# FOCUS RANGE

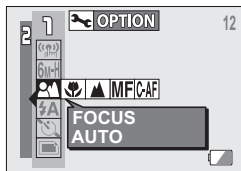
---

## 1 Display PAGE 1 of the Shooting Setting Screen (page 47).

## 2 Select the focus range menu.

- The focus menu appears.

- : The camera automatically focuses on the subject within a range of 10 cm (3.94 in.) (Wide end) or 40 cm (15.75 in.) (Tele end) to infinity (autofocus).
- : You can focus on a subject within a range of 5 cm (1.97 in.) (Wide end) or 40 cm (15.75 in.) (Tele end) to 70 cm (27.56 in.) (macro).
- : You can focus on a subject in the distance (infinity).
- MF**: The focus can be manually set to any distance from 5 cm (1.97 in.) to 8 m (26.25 ft), as well as to infinity (manual focus).
- C-AF**: The camera continuously focuses on the subject (continuous AF: still image shooting mode only).




## 3 Select the desired icon, and press the SET button.

- This completes the focus range setting.

---

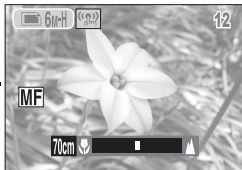
### HINT

- When the focus range is set to macro , the zoom is set to the wide end.
- You can also change the focus range setting from the Shooting Screen by pressing the [▼] button.



## How to use the manual focus

- 1 Display PAGE 1 of the Shooting Setting Screen (page 47).
- 2 Select the manual focus icon **MF** from the focus menu, and press the SET button.
- 3 Press the SET button.
  - The focus distance adjustment bar appears.
- 4 Press the [◀] or [▶] button to adjust the focus distance, and press the SET button.
  - The focus distance is set, and you are returned to the Shooting Screen.



### HINT

#### About the focus range

- The focus distance indication shows the distance between the lens surface and the subject.
- In some cases there may be a slight variance between the distance (numerical figure) you set in the manual focus mode and the actual distance. Use the LCD monitor to confirm the focus and compose the photo.

#### About zoom movement when using the manual focus

- If the focus distance is set to 30 cm (11.81 in.) or less, the zoom changes to the largest setting that is suitable for that focus distance.
- When the focus distance is set to 30 cm (11.81 in.) or less, the zoom will function only within the range at which the image is focused.






---

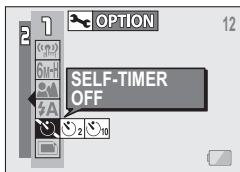
# SELF-TIMER

---

**1** Display PAGE 1 of the Shooting Setting Screen (page 47).

**2** Select the self-timer menu.

- The self-timer icons are shown.
- : Turns off the self-timer function.
- : The image is captured about 2 seconds after the shutter button is pressed.
- : The image is captured about 10 seconds after the shutter button is pressed.





**3** Select the desired icon from the self-timer menu, and press the SET button.

- This completes the self-timer setting.



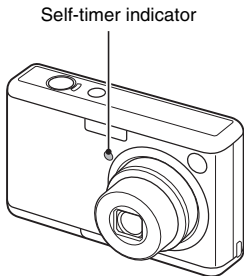
## HINT

### To pause or cancel the self-timer function...

- If the shutter button is pressed again before the shutter is released, the self-timer countdown temporarily stops. Press the shutter button one more time to restart the self-timer.
- To cancel self-timer photography, set the self-timer setting to off .
- After the self-timer picture is snapped, the self-timer is automatically reset to off .

### When is selected...

- When the shutter button is pressed, the self-timer indicator flashes for approximately 10 seconds, after which shooting begins.
- About 3 seconds before shooting, the self-timer indicator flashes faster.





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# SHUTTER OPERATION SETTING






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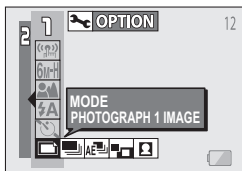
Select how the camera operates when the shutter button is pressed.

---

- 1 Set the camera to the still image shooting mode, and display PAGE 1 of the Shooting Setting Screen (page 47).**

- 2 Select the operation mode menu.**

- : When the shutter button is pressed, a single still image is captured (single shot).
- : When the shutter button is pressed, several still images are captured in succession (sequential shots).
- : Successive still images are captured as the exposure changes (bracket series).
- : Capture a background image and a foreground image, and combine them to create a single image (composite photo).
- : Take ID photos (ID photos).



- 3 Select the desired icon, and press the SET button.**
  - The selected shutter operation is set.

---

## HINT


### Why can't the flash be enabled?

- The flash cannot be used for sequential shots and bracket series photography.



## Shooting sequential shots

When the shutter button is pressed, still images are captured in succession.

- 1 Select the sequential shots icon  from the operation mode menu, and press the SET button.**

- If the resolution is set to **10M**, the setting changes automatically to **6M-H**.

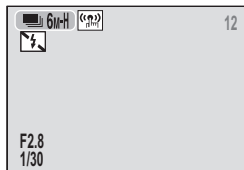
- 2 Press the shutter button to start shooting.**

- Sequential shots shooting begins.  
**<Maximum number of sequential shots>**

**6M-H** **6M-S** : 5 images

**4M** **2M** **0.3M** : 7 images

- Note that if the shutter button is released during shooting, shooting stops immediately.





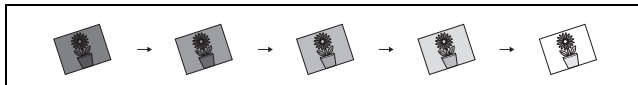
---

## SHUTTER OPERATION SETTING

---

### How to use the auto bracket shots (bracket series) feature

Successive still images are captured as the exposure changes (bracket series).



---

#### 1 Select the bracket series icon from the operation mode menu, and press the SET button.

- If the resolution is set to **[10M]**, the setting automatically changes to **[6M-H]**.

---


#### 2 Press the shutter button.

- When the shutter button is pressed, shooting begins.
- It is not necessary to keep the shutter button depressed.
- During shooting, 7 successive images (or 5 images, if the resolution was set to **[6M-H]** or **[6M-S]**) are captured and shooting ends automatically.

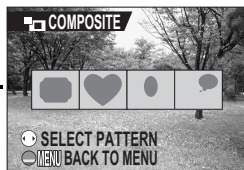


## Composite photo

Shoot two separate still images, and combine them to create a composite still image.

- 1 Select the composite icon  from the operation mode menu, and press the SET button.
  - If the resolution is set to **10M**, the setting changes automatically to **6M+H**.

- 2 Press the SET button again.
  - The frame selection display appears.



- 3 Press the [◀] or [▶] button to select a composite pattern, and press the SET button.
  - The selected frame shape fills the display.

- 4 Capture the image for the background (frame).
  - Point the lens at the background subject, and snap the picture.



- 5 Next, capture the image that will be superimposed in the frame.
  - Take the photo of the image inside the frame.





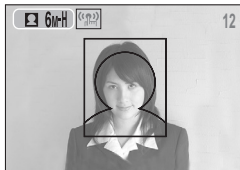
## SHUTTER OPERATION SETTING

### ID photos

You can create ID photos to use in circulars, ads, and other publications, as well as in identification documents.

- 1 Select the ID photo icon  from the operation mode menu, and press the SET button.

- 2 Press the MENU button twice.
  - The ID photo outline appears on the LCD display.






- 3 Align the subject with the ID photo outline, and snap the picture.
  - After the preview screen for the captured image appears, you are returned to the Shooting Setting Screen.
  - Three images are shown in each of two sizes on the Playback Screen.



<Playback Screen>

### CAUTION

#### Restrictions regarding sequential shots, composite photos, and ID photos

- The **[10M]** resolution setting is not available for sequential shots. In addition, the flash cannot be used.
- The **[10M]** resolution setting is not available for composite photos. In addition, the macro  focus range is not available, and the self-timer cannot be used.
- The **[10M]** resolution setting is not available for ID photos. In addition, the macro  and distant object  focus ranges are not available.




---

# FOCUS AREA SETTING

---

You can choose from the following 2 types of autofocus (still image shooting only):

**9-point range finder focus:** The correct focus is determined from 9 different focus points within the shooting area visible on the LCD monitor. When the image is focused, a target mark  appears.

**Spot focus:** The camera focuses on the subject in the center of the LCD monitor.


---


## 1 Display the Shooting Setting Screen (page 47).

---

## 2 Select the focus mode menu.

- The focus mode menu appears.

 **9-~~A~~F**: 9-point range finder focus is selected.

 **S-~~A~~F**: Spot focus is selected.

- When the spot focus setting is selected, the focus mark + appears in the center of the LCD monitor.

---

## 3 Select the desired icon, and press the SET button.

- The focus area is set.





---

# LIGHT-MEASURING MODE SETTING

---

You can select from 3 types of light-measuring modes.

**Multi-section light-measuring:**

The exposure is adjusted after sampling from multiple areas of the entire shooting screen.

**Center-weighted light-measuring:**

The exposure is adjusted after light is measured from the entire image, but with emphasis on the center area.

**Spot light-measuring:**

You can compose the picture and capture the image after first measuring the light only at the center spot of the LCD monitor.


---


## 1 Display the Shooting Setting Screen (page 47).


---

## 2 Select the light-measuring mode (EXP MEASURE) menu.

- The light-measuring mode menu appears.


 : Multi-section light-measuring

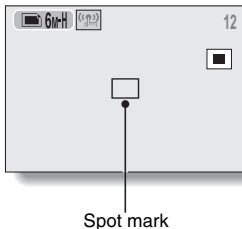
 : Center light-measuring

 : Spot light-measuring

---

## 3 Select the desired icon, and press the SET button.

- This completes the light-measuring mode setting.
- When spot light-measuring is selected, the light-measuring spot mark  appears in the center of the LCD monitor.





---

# ISO SENSITIVITY

---

With the initial settings, the ISO sensitivity is automatically set according to the brightness of the subject. However, the ISO sensitivity can be set to a fixed setting.

---

## 1 Display PAGE 2 of the Shooting Setting Screen (page 47).

---

## 2 Select the ISO sensitivity menu.

- The ISO sensitivity menu appears.

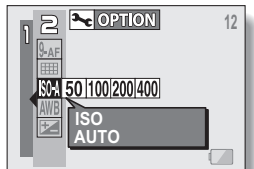
**ISO-A**: Sets the ISO sensitivity automatically (equivalent to ISO50 to 200 [video clip recording mode: ISO100 to 400]).

**50**: Sets the sensitivity to ISO50 equivalent (video clip recording mode: ISO100).

**100**: Sets the sensitivity to ISO100 equivalent (video clip recording mode: ISO200).

**200**: Sets the sensitivity to ISO200 equivalent (video clip recording mode: ISO400).

**400**: Sets the sensitivity to ISO400 equivalent (video clip recording mode: ISO800).



## 3 Select the desired icon, and press the SET button.

- This ISO sensitivity is set.
- 

### HINT

- By setting a higher ISO sensitivity, you can set higher shutter speeds and capture images in darker locations, but noise in the captured images may increase.



---

# WHITE BALANCE

---

This camera automatically adjusts the white balance under most lighting conditions. However, if you want to specify the lighting conditions or change the overall tone of the image, the white balance can be manually set.

---


## 1 Display PAGE 2 of the Shooting Setting Screen (page 47).

---


## 2 Select the white balance menu.


- The white balance menu appears.


**AWB**: The camera will make the white balance adjustment automatically based on the natural and artificial light conditions. This is the setting used in the auto mode.

: For shooting outside on a sunny day.



: For shooting outside on a cloudy day.

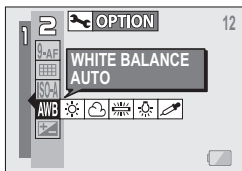
: For shooting inside under fluorescent lighting.

: For shooting inside under incandescent lighting.

: For more accurate adjustment or when the light source cannot be specified (one-push).

### Setting procedure







- ① **Select the  icon and press the SET button.**
  - The  icon moves to the left end of the line.
- ② **Fill the entire screen with a plain white card (or piece of paper, etc.), and press the SET button.**





---

### 3 Select the desired icon, and press the SET button.

- This completes the white balance setting.
- Once the white balance setting is programmed for the  icon, it is retained even if another white balance setting (AWB, , , , or ) is selected. If you changed to another setting, whenever you select the  icon and press the SET button, the previously programmed setting is recalled.

---

#### HINT

##### To cancel the white balance setting

- Perform step 1, select **AWB**, and then press the SET button.



---

# FLICKER-REDUCTION SETTING



---

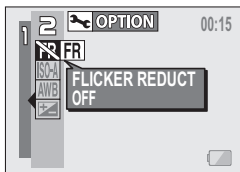
The flicker-reduction setting reduces the flicker phenomenon that results when filming video clips under fluorescent lights and the like where the background lighting pulsates at the frequency of the power supply. The flicker-reduction setting is set for a frequency of 50 Hz.

---

- 1** Set the camera to the video clip recording mode, and display **PAGE 2** of the Shooting Setting Screen (page 47).
- 



- 2** Select the flicker-reduction menu.

- The flicker-reduction menu appears.
- : Turns off the flicker-reduction setting.
- : Turns on the flicker-reduction setting.



- 3** Select the desired icon, and press the **SET** button.
- The flicker-reduction is set.
- 

## HINT

- Note that although the flicker-reduction setting decreases the image flicker that occurs under fluorescent lighting, the image quality may deteriorate slightly.
- If the flicker-reduction setting is used outdoors on a very bright day, a halation effect may occur.
- If the flicker-reduction is set to , then the ISO sensitivity setting becomes fixed at .



# DISPLAYING THE PLAYBACK SETTING SCREENS

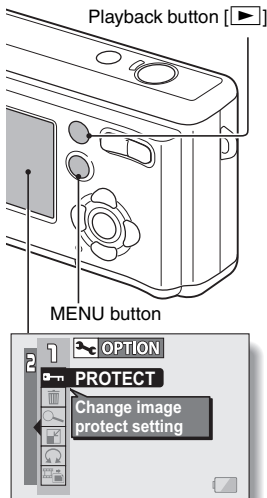
The Playback Setting Screens are used to adjust your camera's playback settings.

## 1 Press the playback button [▶].

- The display changes to the Playback Screen.

## 2 Press the MENU button.

- The Playback Setting Screen appears.



## To cancel the Playback Setting Screen

When the MENU button is pressed, you are returned to the Playback Screen.



# DISPLAYING THE PLAYBACK SETTING SCREENS

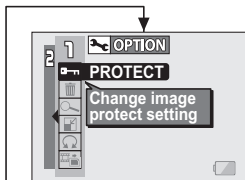
## Switching the page

The Playback Setting Screen consists of two pages: **PAGE 1** and **PAGE 2**.

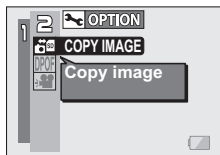
### 1 Display a Playback Setting Screen.

### 2 Press the [◀] button.

- The Playback Setting Screen changes to the other PAGE.
- Each time the [◀] button is pressed, the PAGE changes.



<Playback Setting Screen: PAGE 1>



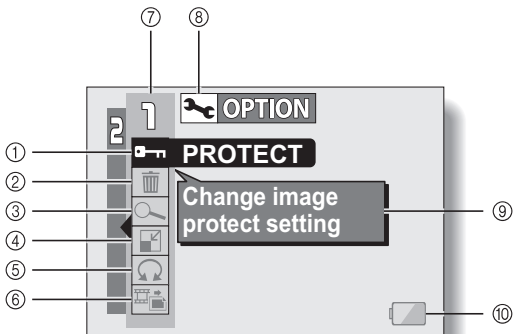
<Playback Setting Screen: PAGE 2>





## Overview of the Playback Setting Screens

### PAGE 1

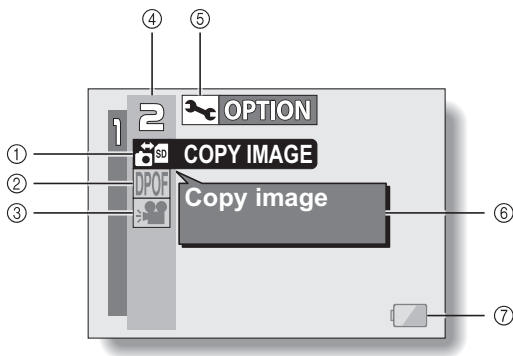


- |   |   |
|---|---|
| <p>① <b>Protect (page 78)</b></p> <ul style="list-style-type: none"><li>• Protect data from accidental erasure (write protect).</li></ul> <p>② <b>Erase (page 80)</b></p> <ul style="list-style-type: none"><li>• Delete images from the card memory.</li></ul> <p>③ <b>Zoom jump playback (page 82)</b></p> <ul style="list-style-type: none"><li>• Magnify the image for a better view of the details.</li></ul> <p>④ <b>Resize (page 83)</b></p> <ul style="list-style-type: none"><li>• Reduce the resolution of a still image.</li></ul> <p>⑤ <b>Rotate image (page 84)</b></p> <ul style="list-style-type: none"><li>• Rotate still images.</li></ul> | <p>⑥ <b>Extract still image (page 85)</b></p> <ul style="list-style-type: none"><li>• Extract a still image from a video clip.</li></ul> <p>⑦ <b>PAGE display (page 75)</b></p> <p>⑧ <b>Option icon (page 98)</b></p> <ul style="list-style-type: none"><li>• Display the Option Screen.</li></ul> <p>⑨ <b>Help display (page 103)</b></p> <p>⑩ <b>Remaining battery power (page 117)</b></p> |
|---|---|



## DISPLAYING THE PLAYBACK SETTING SCREENS

### PAGE 2



- ① **Copy image (page 86)**
- ② **Print settings (page 88)**
  - Specify the print settings.
- ③ **Slideshow (page 95)**
  - Play back the images in a slideshow format.
- ④ **PAGE display (page 75)**
- ⑤ **Option icon (page 98)**
  - Display the Option Screen.
- ⑥ **Help display (page 103)**
- ⑦ **Remaining battery power (page 117)**



---

# IMAGE PROTECT

---

Prevent accidental erasure of data.

---


- 1** Display the data that you want to protect from accidental erasure, and display PAGE 1 of the Playback Setting Screen (page 74).

- 2** Select the protect icon , and press the SET button.

- "LOCK?" appears.
- If the protect mode has already been enabled for the data, then "UNLOCK?" appears.



- 3** Press the [▲] or [▼] button to select "YES", and press the SET button.

- The protect mode is set for the data.
- The protect mark  indicates that the data is locked.
- To return to the Playback Setting Screen, press the MENU button.





---

## IMAGE PROTECT

---

### CAUTION

- Even if the protect mode is set for certain data files, they will be erased if the card is reformatted (page 113).


---

### HINT

#### **To select a different image in steps 2 and 3...**

- Press the [◀] or [▶] button.

#### **To cancel the protect mode for an image...**

- Display the desired data and repeat steps 1 to 3. The protect mark  will disappear and the protect mode is canceled.



---


# ERASING DATA

---

You can erase data that is stored on the card if you no longer need it. You can erase the data one at a time, or all at once.

- 
- 1** To erase data from the card, perform the erase procedure with the card installed in the camera. To erase data from the camera's internal memory, remove the card before performing the erase procedure.
- 

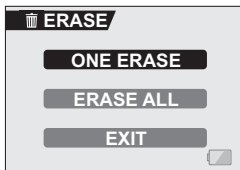
- 2** Display PAGE 1 of the Playback Setting Screen (page 74).
- 

- 3** Select the erase icon , and press the SET button.

- The Erase Mode Screen appears.  
**ONE ERASE:** Erases one data at a time.

**ERASE ALL:** Erases all the data.

**EXIT:** Returns to the Playback Setting Screen.



- 
- 4** Press the [▲] or [▼] button to select the erase mode, and press the SET button.

- The Erase Confirmation Screen appears.

<ONE ERASE>

- Press the [◀] or [▶] button to select the data you wish to erase.

<ERASE ALL>

- Press the [◀] or [▶] button to make sure that it is all right to erase all the data.



---

## ERASING DATA

---

### **5** Select “YES” and press the SET button.

#### **<ONE ERASE>**

- The currently displayed image is deleted.
- To erase other data, select the data, and press the SET button.

#### **<ERASE ALL>**

- The Erase Confirmation Screen again appears. To erase the data, select “YES”, and press the SET button. When data erase is completed, “NO IMAGE” is shown.

---

### **CAUTION**

#### **About protected images**

- Data which is protected from accidental erase cannot be erased. To erase protected data, set the protect setting for the data to off (page 78), and then follow the data erase procedure.

---

### **HINT**

- You can also access the One Erase Confirmation Screen from the Playback Screen by pressing the [▲] button.




# ZOOM JUMP PLAYBACK



You can magnify a portion of a still image to check the accuracy of the focus.

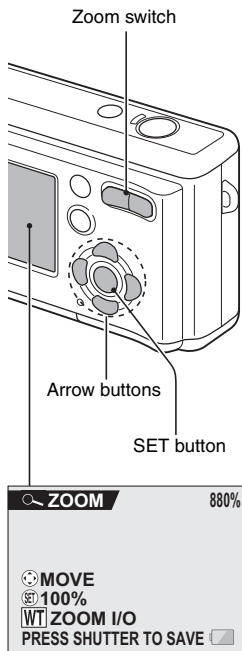
- 1 **Display a still image to view using zoom jump playback.**

- 2 **Press the SET button.**

- The image is magnified.
- If the magnified view appears to be in focus, then the overall image will be in focus.

- 3 **Press the arrow buttons to move to the part you wish to magnify, and press [T] ([]) on the zoom switch.**

- The displayed area is further magnified.  
To magnify further: Magnification increases with each press of [T] ([]) on the zoom switch.  
To go back: Magnification decreases with each press of [W] ([]) on the zoom switch.
- Press the SET button again to return to the normal size (100%) screen.



## HINT

- Zoom jump playback can also be accessed from the Playback Setting Screen.



---

# CHANGING IMAGE SIZE (RESIZE)

---

The size of a still image that has already been captured at a resolution of **2M** or more can be changed to 1,600 × 1,200 pixels or 640 × 480 pixels. The resized image is saved as a separate image.

---

**1** Display the still image whose size you want to change.

---

**2** Display **PAGE 1** of the Playback Setting Screen (page 74).

---

**3** Select the resize icon , and press the **SET** button.

- The Resize Screen appears.



**4** Select the new image size.

**2M (1600 × 1200):** The saved image will be 1,600 × 1,200 pixels.

**0.3M (640 × 480):** The saved image will be 640 × 480 pixels.

**EXIT:** Return to the Playback Setting Screen.

---

**5** Press the **SET** button.

- Resizing begins.
- 

## HINT

### Why can't the image be resized?

- An image can be resized only to a smaller (or the same) size, not to a larger size.



---


# ROTATE IMAGE

---

Captured still images can be rotated to the correct orientation for viewing.

---

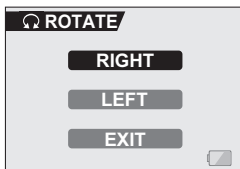
- 1** Display the image you wish to rotate, and display **PAGE 1** of the Playback Setting Screen (page 74).

- 2** Select the rotate icon , and press the **SET** button.
  - The Rotate Image Screen appears.

**RIGHT:** Rotates image clockwise  
90 degrees.

**LEFT:** Rotates image counterclockwise  
90 degrees.

**EXIT:** Return to the Playback Setting  
Screen.



- 3** Select **“RIGHT”** or **“LEFT”**, and press the **SET** button.
  - Each time the SET button is pressed, the image is rotated another 90 degrees.

---

## HINT

- On the 9-image display playback, rotated images are shown in their original orientation.



---

# EXTRACTING A STILL IMAGE FROM A VIDEO CLIP

---

You can select one image (scene) from a video clip, copy it, and save it as a still image (the original data remains unchanged).

---

**1** Play back a video clip, and pause at the point you wish to copy and save.

---

**2** Display PAGE 1 of the Playback Setting Screen (page 74).

---

**3** Select the extract still icon , and press the SET button.

- The screen to extract an image appears.

**YES:** The image is copied and saved as a still image (the original data is left unchanged).

**EXIT:** You are returned to the Playback Setting Screen.



---

**4** Select “YES” and press the SET button.

- The image is extracted.

---

## HINT

To select a different image (frame) in step 3...

- Press the [◀] or [▶] button.



---

# COPY DATA

---

Images recorded in the camera's internal memory can be copied to the card, and likewise from the card to the internal memory.

---

**1** Insert the card in the camera (page 14).

---

**2** Display PAGE 2 of the Playback Setting Screen (page 74).

---

**3** Select the copy image icon , and press the **SET** button.

- The Copy Image Screen appears.

---

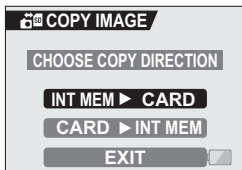
**4** Press the [**▲**] or [**▼**] button to select the copy direction.

**INT MEM ► CARD:**

Copy image data from the internal memory to the card.

**CARD ► INT MEM:**

Copy image data from the card to the internal memory.



\* If no card is set in the camera, you cannot copy data.



---

## COPY DATA

---

### 5 Press the SET button.

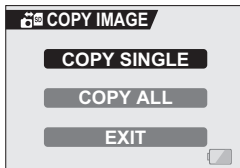
- The screen to select the type of copy appears.
- The copy source is shown in the background on the screen.

#### **COPY SINGLE:**

Copy the data for one image.

#### **COPY ALL:**

Copy all the data from the copy source to the copy destination.



---

### 6 Select the desired type of copy. <When selecting COPY SINGLE>

- ① Press the [◀] or [▶] button to display the image you wish to copy.
- ② Press the [▲] or [▼] button to select "COPY SINGLE".

#### <When selecting COPY ALL>

- ① Press the [▲] or [▼] button to select "COPY ALL".

---

### 7 Press the SET button.

- The Copy Confirmation Screen appears.
- To continue the copy procedure, select "YES" and press the SET button.
- To discontinue the copy procedure and return to the screen in step 5, select "EXIT" and press the SET button, or press the MENU button.



---


# PRINT SETTINGS

---

In addition to using your printer to print out still images captured with your camera, as with conventional film, you can have prints made at shops offering digital print services. Moreover, this camera is DPOF-compatible, so you can use the camera to specify the number of prints, whether or not the date is displayed on the print, and also to specify an index print.

## Display the Print Settings Screen

**1** Display **PAGE 2** of the Playback Setting Screen (page 74).

**2** Select the print settings icon , and press the **SET** button.

- The Print Setting Screen appears.

**ALL IMAGES:**

The specified print settings apply to all the still images on the card.

**EACH IMAGE:**

The print settings are specified for each individual image.

**INDEX:**

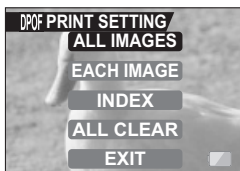
All the still images are printed as miniature images (thumbnail images), several images on one print.

**ALL CLEAR:**

Clear all the print settings. This cannot be selected if no print settings have been made for the image.

**EXIT:**

Return to the Still Image Playback Setting Screen.





---

## PRINT SETTINGS

---

### HINT

#### **Printing a single frame from a video clip**

- To print with a printer or have the digital print service shop print out a still image from a video clip, you must first save it (save frame [page 85]) as a still image.

#### **About the DPOF format**

- DPOF (Digital Print Order Format) is a print order format. You can connect your camera to a DPOF-compatible printer to produce your prints. You can also set the print settings (page 125) for the desired images, and then have the reserved images printed automatically.

#### **About the finished prints**

- Images that have been rotated will be printed in their original orientation.
- The quality of the print output will differ depending on the print service and printer used.



## Specifying date imprinting and number of prints

You can specify print settings for each individual image (**EACH IMAGE**), or apply the print settings to all the images on the card (**ALL IMAGES**).

### 1 Display the Print Setting Screen (page 88).

### 2 Select **ALL IMAGES** or **EACH IMAGE**.

#### **ALL IMAGES:**

The set print settings are applied to all the still images on the card.

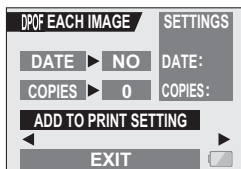
#### **EACH IMAGE:**

The set print settings are applied only to the image currently displayed.



### 3 Press the **SET** button.

- The Date/Copies Print Screen appears.
- If "EACH IMAGE" was selected, press the [◀] or [▶] button to display the desired image to print.
- Under "SETTINGS" the settings that are currently active for the displayed image are shown. You can press the [◀] or [▶] button to confirm the print settings for each image.





## PRINT SETTINGS

### 4 Specify whether the date is displayed on the print, and the number of prints.

#### <Specifying dated prints>

- ① Press the [▲] or [▼] button to select "DATE".
- ② Press the SET button.
  - The Print Date Screen appears.
- ③ Press the [▲] or [▼] button to select the desired option.

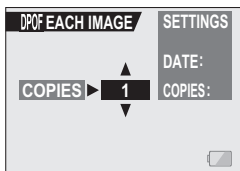
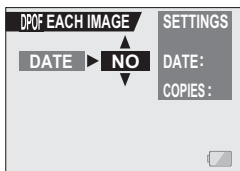
**YES:** Print the date.

**NO:** Do not print the date.

- ④ Press the SET button.
  - You are returned to the Date/Copies Print Screen.

#### <Specifying the number of prints>

- ① Press the [▲] or [▼] button to select "COPIES".
- ② Press the SET button.
  - The Print Number Screen appears.
- ③ Press the [▲] or [▼] button to specify the number of prints.
  - Press the [▲] or [▼] button until the desired number of prints is displayed.
- ④ Press the SET button.
  - You are returned to the Date/Copies Print Screen.





---

**5** Select “ADD TO PRINT SETTING” and press the SET button.

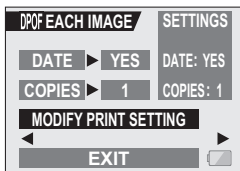
- The Confirm Print Settings Screen appears.

**If the print settings are correct:**

Select “EXIT”, and press the SET button.

**If the print settings were changed:**

Select “MODIFY PRINT SETTING”, and press the SET button.



## Index print

Printing out many small images on one sheet is called an “index print”. This is convenient for use as a list of the images you have captured.

---

**1** Display the Print Setting Screen (page 88).

---

**2** Select “INDEX”.





---

## PRINT SETTINGS

---

- 3 Press the SET button.**
- The Index Print Screen appears.  
**YES:**  
Specify an index print copy.  
**EXIT:**  
Discontinue the setting procedure, and return to the Print Setting Screen.



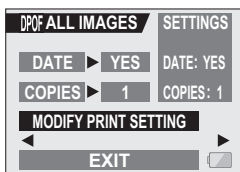
- 4 Select "YES", and press the SET button.**
- This completes the setting for the index print. You are returned to the Print Setting Screen.

### Changing the print settings

---

- 1 Follow steps 1 to 4 on pages 90 and 91.**

- 2 Select "MODIFY PRINT SETTING", and press the SET button.**





## Clearing all the print settings

Delete the print settings for all images.

**1** Display the Print Setting Screen (page 88).

**2** Select "ALL CLEAR".



**3** Press the SET button.

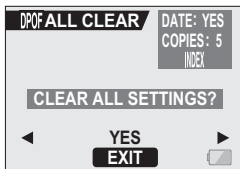
- The Confirm All Clear Screen appears.

**YES:** Clear the print settings for all images.

**EXIT:** Cancel the clear procedure and return to the Print Setting Screen.

**4** Select "YES", and press the SET button.

- All the print settings are cleared and you are returned to the Print Setting Screen.





---

# SLIDESHOW PLAYBACK

---

## 1 Display PAGE 2 of the Playback Setting Screen (page 74).

## 2 Select the slideshow icon , and press the SET button.

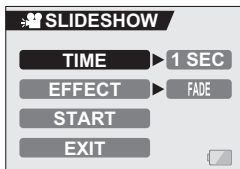
- The Slideshow Screen appears.

**TIME:** Adjust the transition speed (the period that an image is displayed before it changes to the next image).

**EFFECT:** Select a transition effect as an image changes to the next image.

**START:** Begin slideshow playback.

**EXIT:** Return to the Playback Setting Screen.



### <Changing the transition speed or transition effect>

- ① Select "TIME" or "EFFECT", press the SET button.
- ② Press the [▲] or [▼] button to change the setting.
- ③ Press the SET button.



---

### **3** Select “START”, and press the SET button.

- Slideshow playback starts.
- To stop slideshow playback, press the SET button or MENU button.



# DISPLAYING IMAGE PROPERTIES (INFORMATION SCREEN)

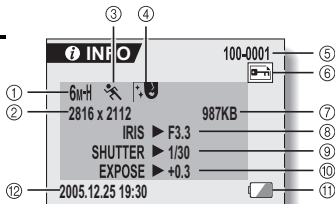
On the Information Screen you can check what the settings were when an image was captured.

## 1 Display the desired image (pages 29 and 33).

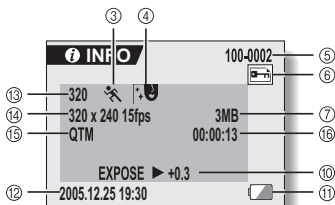
## 2 Press and hold the MENU button for at least 2 seconds.

- The Information Screen appears.
- If the MENU button is pressed again, the Information Screen is canceled.

- ① Resolution setting
- ② Resolution
- ③ Scene select function setting
- ④ Filter function setting
- ⑤ Image number
- ⑥ Protect setting
- ⑦ File size
- ⑧ Aperture value
- ⑨ Shutter speed
- ⑩ Exposure correction setting
- ⑪ Remaining card memory
- ⑫ Date and time of image
- ⑬ Video clip mode settings
- ⑭ Resolution and frame rate
- ⑮ File format
- ⑯ Playback time



<Still image playback>



<Video clip playback>



# DISPLAYING THE OPTION SCREEN

The Option Screen is used to adjust various camera settings.

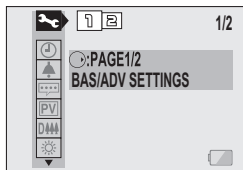
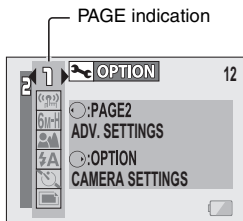
## 1 Display the Shooting Setting Screen or Playback Setting screen.

- Shooting Setting Screen, see (page 47)
- Playback Setting Screen, see (page 74)

## 2 Press the [▲] or [▼] button to select the PAGE indication.

## 3 Press the [▶] button.

- The Option Screen appears.
- If the [▼] button is pressed, the Option Screen menu appears.



## To exit the Option Screen

**To return to the Shooting Screen or Playback Screen**

→ Press the MENU button.

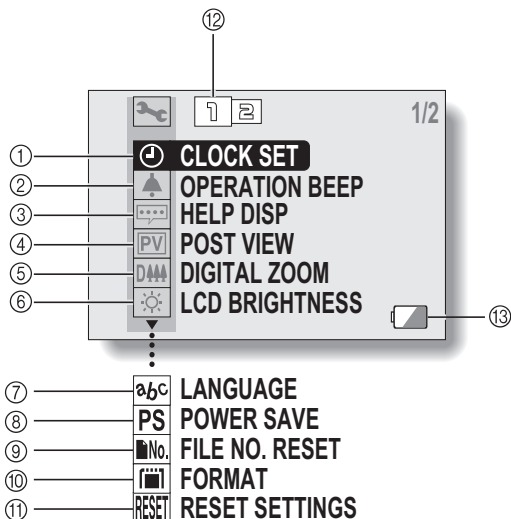
**To return to the Shooting Setting Screen or the Playback Setting Screen**

→ Select the PAGE indication, and press the [▶] button.



## DISPLAYING THE OPTION SCREEN

### Overview of the Option Screen





- ① **Date and time setting (page 19)**
  - Set the camera's internal clock.
- ② **Operation sounds setting (page 101)**
  - Adjust the operation sounds produced when the camera's buttons are pressed.
- ③ **Help display setting (page 103)**
  - Turn the help display on or off.
- ④ **Post-view (page 104)**
  - Specify how long a still image is displayed on the LCD monitor after it is captured.
- ⑤ **Digital zoom (page 105)**
  - Set the digital zoom to ON or OFF.
- ⑥ **Monitor brightness (page 106)**
  - Adjust the brightness of the LCD monitor.
- ⑦ **Screen language (page 107)**
  - Select the language in which the LCD monitor messages are displayed.
- ⑧ **Power save function (page 108)**
  - Specify the time elapsed before the power save mode is activated.
- ⑨ **File number reset (page 110)**
  - Set the file number reset function to ON or OFF.
- ⑩ **Format (page 113)**
  - Reformat the camera's internal memory or the card installed in the camera.
- ⑪ **Reset camera settings (page 115)**
  - Reset the camera to the factory-preset settings.
- ⑫ **PAGE display (pages 48, 75 and 98)**
- ⑬ **Remaining battery power (page 117)**

- Icons ⑦ through ⑪ are displayed when you press the [▲] or [▼] button to scroll.



---

# OPERATION SOUNDS

---

This setting allows you to set whether or not a confirming audio signal sounds when the operation buttons (shutter button, SET button, MENU button, etc.) are pressed.

---

## 1 Display the Option Screen (page 98).

---

## 2 Select the operation beep icon , and press the SET button.

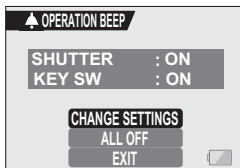
- The Operation Beep Setting Screen appears.
- The current settings are shown on the screen.
- If “ALL OFF” is selected and the SET button pressed, all the operation sounds are muted.
- If “EXIT” is selected and the SET button pressed, you are returned to the Option Screen.

### **SHUTTER:**

Select the sound that is produced when the still image shooting button is pressed, or when a photo is taken using the self-timer.

### **KEY SW:**

Select the sound that is produced when a camera button (SET button, MENU button, etc.) is pressed.





---

**3** Select “CHANGE SETTINGS”, and press the SET button.

- The screen to select the operation buttons appears.

**SHUTTER:**

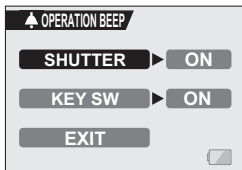
Set the sound for the shutter button.

**KEY SW:**

Set the sounds of the operation buttons (except for the ON/OFF button and shutter button).

**EXIT:**

Return to the Operation Sounds Screen.



---

**4** Select the desired operation button, and press the SET button.

- The screen to change the setting appears.

---

**5** Press the [▲] or [▼] button to change the setting.

**ON:** Activates the sound.

**OFF:** Deactivates the sound.

---

**6** Press the SET button.

---

**7** Select “EXIT”, and press the SET button.

- The operation sound settings are completed.



---

# HELP DISPLAY

---

You can set whether or not the help messages are shown on the LCD monitor.

---

## 1 Display the Option Screen (page 98).

## 2 Select the help display icon and press the SET button.

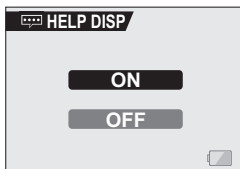
- The Help Setting Screen appears.

**ON:**

The HELP messages are enabled.

**OFF:**

The HELP messages are disabled.



## 3 Select the desired setting, and press the SET button.

- This completes the help display setting.



---

# POST-VIEW SETTING

---

Specify the duration that the captured image appears on the LCD monitor (post-view) after the shutter button is pressed.

---

## 1 Display the Option Screen (page 98).

## 2 Select the post-view icon , and press the SET button.

- The Post-view Screen appears.

### 1 SEC:

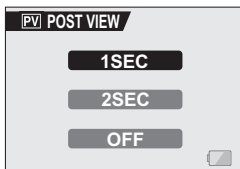
The post-view image is displayed for 1 second.

### 2 SEC:

The post-view image is displayed for 2 seconds.

### OFF:

The post-view image is not displayed.



## 3 Select the desired setting, and press the SET button.

- This completes the post-view setting.



---

# DIGITAL ZOOM SETTING


---

Set the digital zoom setting to ON or OFF. If the deterioration of image quality characteristic of the digital zoom function is not to your liking, you may choose to disable the digital zoom (OFF) and shoot using only the optical zoom.

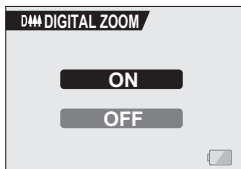
---

**1** Display the Option Screen (page 98).

---

**2** Select the digital zoom icon , and press the SET button.

- The Digital Zoom Screen appears.  
**ON:** Digital zoom is enabled.  
**OFF:** Digital zoom is disabled.



---


**3** Select the desired function, and press the SET button.

- This completes the digital zoom setting.

---

## HINT

**Why doesn't the digital zoom work even though it is set to ON?**

- The digital zoom does not function in the following situation:  
When the resolution is set to .



---

# LCD MONITOR BRIGHTNESS

---

Adjust the brightness of the camera's LCD monitor display. Use this adjustment when the monitor image is difficult to view because of ambient lighting.

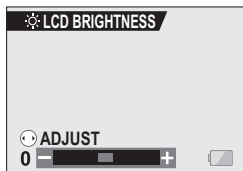
In addition, in very bright surroundings, such as outdoors on a sunny day, you can turn the backlight OFF to preserve battery power.

---

## 1 Display the Option Screen (page 98).

## 2 Select the LCD brightness icon , and press the SET button.

- The brightness control display appears.



## 3 Press the [◀] or [▶] button to set the brightness, and press the SET button.

- The LCD monitor brightness is set.

---

### HINT

- The display in step 2 can also be accessed from the Shooting Screen. Press and hold the MENU button for at least 1 second; the brightness control display will appear, and you can then adjust the monitor brightness.



---

# SCREEN LANGUAGE

---

You can set the LCD monitor of your camera to display the messages in any one of several languages.

---

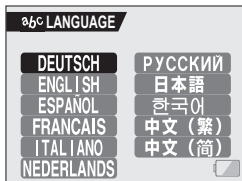
## 1 Display the Option Screen (page 98).

---

## 2 Select the language icon , and press the SET button.

- The Language Screen appears.

<b>DEUTSCH:</b>	German
<b>ENGLISH:</b>	English
<b>ESPAÑOL:</b>	Spanish
<b>FRANCAIS:</b>	French
<b>ITALIANO:</b>	Italian
<b>NEDERLANDS:</b>	Dutch
<b>РУССКИЙ:</b>	Russian
<b>日本語:</b>	Japanese
<b>한국어:</b>	Korean
<b>中文(繁):</b>	Chinese (traditional)
<b>中文(简):</b>	Chinese (simplified)



---

## 3 Select the desired language, and press the SET button.

- The selected display language is set.



---

# POWER SAVE FUNCTION

---

Your camera has a “power save” function whereby the power automatically turns off after a specified period of inactivity. The power save function works to conserve the battery power when the camera is not being used, or to prevent the batteries from dying if the camera has accidentally been left on. You can specify the elapsed time (standby time) before the power save function is activated.

---

## 1 Display the Option Screen (page 98).

---

## 2 Select the power save icon [PS], and press the SET button.

- The Power Save Setting Screen appears.

### **BATT/CAM:**

Set the standby time for the shooting modes when the battery is used.

### **BATT/PB:**

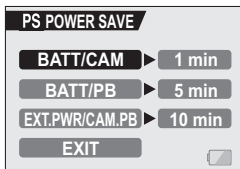
Set the standby time for the playback modes when the battery is used.

### **EXT.PWR/CAM.PB:**

Set the standby time for the shooting and playback modes when using an AC power source.

### **EXIT:**

Return to the Option Screen.





---

## POWER SAVE FUNCTION

---

---

### 3 Select the desired option, and press the SET button.

- The Set Standby Time Screen appears.

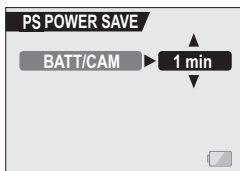
---

### 4 Press the [▲] or [▼] button to set the standby time.

---

### 5 Press the SET button.

- The power save function is set.



<Example: When "BATT/CAM" is selected>



---

# FILE No. RESET FUNCTION

---

If a newly formatted (page 113) card is used, the file name (image number) of the captured image automatically begins from 0001. If the card is subsequently reformatted, or if a different reformatted card is used, the file names again begin from 0001. This is because the file number reset function is set to "ON", and consequently it results in more than one card containing images with the same numbers. By setting the file number reset function to "OFF", even if the card is reformatted or the card is replaced with another card, the consecutive numbering of file names continues from the last number recorded by the camera.

## <File number reset function "ON">

	File name (image number)
Card A	0001, 0002..... 0012, 0013

:  
Replace card  
↓

Card B	0001, 0002..... 0012, 0013
--------	----------------------------

## <File number reset function "OFF">

	File name (image number)
Card A	0001, 0002..... 0012, 0013

:  
Replace card  
↓

Card B	0014, 0015.....0025, 0026
--------	---------------------------



---

## FILE No. RESET FUNCTION

---

- If Card B already has image data in it when it replaces Card A, file names are assigned as follows.

**When the highest image number on Card B (before replacing) is lower than the highest image number on Card A:** the file name of the next recorded image continues from last file name recorded on Card A.



**When the highest image number on Card B (before replacing) is higher than the highest image number on Card A:** the file name of the next recorded image continues from last file name recorded on Card B.



---

### HINT

#### What about the internal memory?

- The file number reset function works the same for the internal memory.



---

**1** Display the Option Screen (page 98).

---

**2** Select the file number reset icon .

---

**3** Press the **SET** button.

- The File Number Reset Screen appears.

**ON:**

The file number reset function is "ON".

**OFF:**

The file number reset function is "OFF".



---

**4** Select "OFF", and press the **SET** button.

- The file number reset function was set to OFF.

---

#### HINT

- Until the file number reset function is turned "ON", consecutive file names are assigned. It is recommended that the file number reset function be returned to "ON" at the end of each photography session.



---

# INITIALIZING THE CARD MEMORY AND INTERNAL MEMORY

---

The supplied card must be formatted with this camera. In addition, a card must be formatted with this camera:

- After purchasing, when used for the first time, or
- If it was formatted using a personal computer or another digital camera.

The card cannot be reformatted if the lock switch is set to the "LOCK" position. Proceed with the reformat procedure after setting the lock switch to the unlocked position.


---

**1** To reformat a card, install it in the camera. To reformat the camera's internal memory, remove the card from the camera.

---

**2** Display the Option Screen (page 98).

---

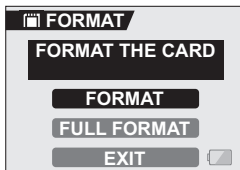
- 3** Select the format icon , and press the SET button.
- The screen to select the type of format appears.
  - In normal use, a full format is not necessary. However, in case a card error occurs even after normal formatting, executing a full format may resolve the problem.

**FORMAT:**

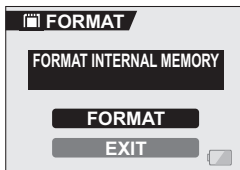
A normal formatting is executed.

**FULL FORMAT:**

The entire card is scanned and reformatted. It is not possible to select this when there is no card installed, or when the remaining battery charge is low.



<With card installed>



<No card installed>



- 
- 4** Select the desired format option, and press the SET button.
- The Confirm Format Screen appears.

- 
- 5** Select “YES”.

- 
- 6** Press the SET button.
- Formatting begins.
  - During formatting, “FORMATTING” and “DO NOT POWER OFF” are shown on the LCD monitor.

---

## **CAUTION**

### **Caution during reformatting**

- Please do not turn off the camera or insert/remove the card while the card is being formatted.

### **Reformatting erases the data**

- When the card or internal memory is initialized, all the recorded data is erased. Protected data is also erased, so before reformatting a card, any data you want to keep should be copied to your personal computer's hard disk or other storage medium.

### **Can data be restored after a card is formatted?**

- It may be possible to restore data from a reformatted card by using application software designed to restore data. However, even such application software cannot restore data after a full format has been executed. It is recommended that a full format be executed before you dispose of a card or transfer it to someone else.

---

## **HINT**

### **To cancel reformatting**

- In step 5, select “NO”, and press the SET button.



---

# RESETTING THE CAMERA SETTINGS

---

Reset the camera to the factory-preset settings.

---

## 1 Display the Option Screen (page 98).

---

## 2 Select the reset settings icon , and press the SET button.

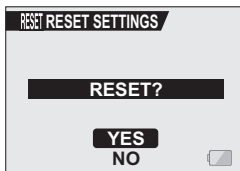
- The Reset Settings Screen appears.

**YES:**

Reset to the factory-preset settings.

**NO:**

Do not change the settings, and return to the Option Screen.



---

## 3 Select “YES”, and press the SET button.

- The camera settings are reset to the factory-preset settings.

---

### HINT

- Note that the following settings do not change with this procedure:
  - Date and time setting**
  - Language setting**



---

# CHECKING THE REMAINING INTERNAL MEMORY AND CARD MEMORY

---

You can check how many images can be captured on the card. For a table showing the maximum number of images and recording time for the internal memory and for a specific card, please see “Possible No. of Images/Possible Shooting Time” on page 146.

---

## 1 Press the ON/OFF button to turn the camera on, and press the MENU button.

- The Mode Select Screen appears.

### <To check the remaining number of still images>

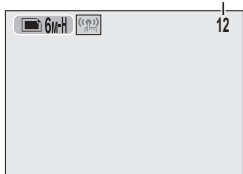
Select PHOTO, and press the MENU button.

### <To check the remaining video clip recording time>

Select MOVIE, and press the MENU button.

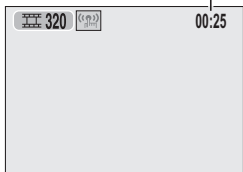
- The remaining number of still images or video clip recording time is shown on the LCD monitor.
- The remaining number of images and video recording time will differ depending on the resolution setting.

Remaining number of images



<Still Image Shooting Screen>

Remaining recording time



<Video Clip Recording Screen>

---

## HINT


- When the remaining number of images or the remaining video recording time is “0”, you cannot capture any more images. To capture more images, either install a new card, or save the images to a computer and then erase them (page 80) from the card.
- When the remaining number of images or the remaining video recording time is “0”, it may be possible to capture a few more images by setting a lower resolution setting (page 58).



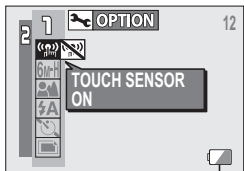
# CHECKING THE REMAINING BATTERY CHARGE

When using batteries, the remaining battery charge can be checked on the LCD monitor. Make sure to check this indicator before capturing an image. For an indication of the possible length of time for battery operation, see page 145.





## 1 Display a Shooting or Playback Setting Screen (pages 47 and 74).

- The battery remaining charge indicator appears in the lower right corner of the LCD monitor.
- Due to the battery characteristics, when the ambient temperature is low,  may appear early for an incorrect indication of the remaining charge.

Also, depending on the conditions of use of the camera or the ambient conditions (temperature, etc.), the indicated remaining charge may change. Therefore, this indication can only be used as a general approximation of the remaining charge.



Battery remaining charge indicator

Battery remaining charge indicator	Battery remaining charge
	Approx. full.
	Power is low.
	It will soon be impossible to capture or play back images.
	If this icon flashes when the shutter button is pressed, images cannot be captured. Replace the batteries.



---

## HINT

- If any data is present, you can also check the remaining battery charge on the Playback Setting Screen or Information Screen.
- Battery life may differ even among batteries of the same type.
- Depending on the usage of the camera (such as the number of times the flash is used, etc.) or the ambient temperature (temperatures below 10°C [50°F]) the number of images that can be saved on fully charged batteries will vary greatly.
- It is recommended that you prepare extra batteries when taking pictures at a wedding or while traveling, for example, so you don't miss capturing images of important moments due to the battery power running out. The same is recommended for taking photos in cold environments. (In a ski area, for example, the batteries can be kept warm in your pocket until ready to use.)

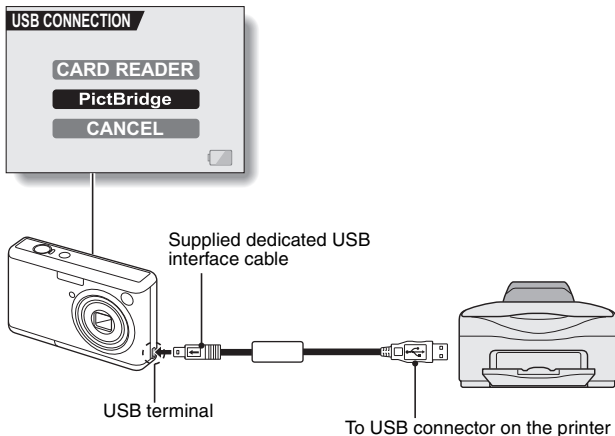


# DIRECT PRINTING

Your camera supports the PictBridge function. By connecting the camera directly to a PictBridge-enabled printer, the camera's LCD monitor can be used to select images and initiate printing (PictBridge printing).

## Print preparations

- 1 Insert the card containing the images you wish to print in the camera.
- 2 Turn the printer on, and use the supplied USB interface cable to connect the camera to the printer.
  - Connect the camera's USB terminal to the printer's USB connector.
  - The USB Connection Screen appears on the camera's LCD monitor.





- 
- 3** Select “PictBridge”, and press the **SET** button.
- The Print Settings Screen appears.



---

## CAUTION

### Caution when connecting a printer

- If the power to the printer is turned off while it is connected, the camera may not operate correctly. If the camera does not operate correctly, disconnect the USB interface cable, turn off the camera, and then reconnect the cable.
- During PictBridge printing, the camera's button operation response is slower.
- If the camera is powered by batteries for printing, make sure that the remaining battery charge is sufficient.

### Insert and pull out the cable carefully

- When connecting the cables, make sure that the cable plugs are correctly oriented and that they match the shapes of the terminal sockets on the devices. Push the plugs in straight when connecting them. If undue force is used to connect a cable, it may permanently damage the connector pins in the terminal socket.
- Do not use excessive force when connecting and disconnecting cables.



---

## DIRECT PRINTING

---

### To select one image and print it (one image)

Procedure to select one still image and print it.

---

**1** Complete the printing setup (page 119).

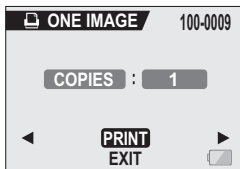
---

**2** Select the one image icon , and press the **SET** button.

- The screen to select images for printing appears.
- 

**3** Press the [**◀**] or [**▶**] button.

- Specify the image to print.

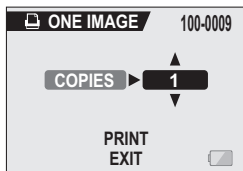




---

## 4 Specify the number of prints.

- ① Select "COPIES", and press the SET button.
- ② Press the [▲] or [▼] button to specify the number of prints.
- ③ Press the SET button.
  - "PRINT" is selected.



---

## 5 Press the SET button.

- Printing begins.

---

### HINT

#### To cancel printing

- ① During printing, press the [▼] button.
  - The Confirm Cancel Printing Screen appears.
- ② Select "YES", and press the SET button.
  - If "EXIT" is selected and the SET button is pressed, printing resumes.



---

## DIRECT PRINTING

---

### To print all the images (all images)

Print all of the images.

---

**1** Complete the printing setup (page 119).

---

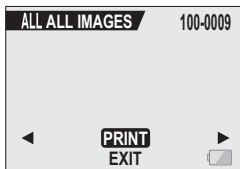
**2** Select the all images icon **ALL**, and press the **SET** button.

- The Print All Images Screen appears.

---

**3** Select **"PRINT"**, and press the **SET** button.

- Printing begins.



---

#### CAUTION

Printing is not possible if there are more than 999 still images in the card.

- Delete unwanted images before printing.



## Thumbnail prints (index)

Make an index print of all the images.

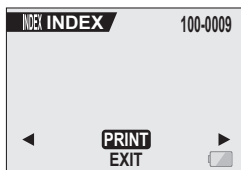
**1** Complete the printing setup (page 119).

**2** Select the index print icon , and press the SET button.

- The Index Print Screen appears.

**3** Select “PRINT”, and press the SET button.

- Printing begins.





---

## DIRECT PRINTING


---

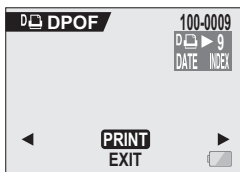
### To print the images that are set to print (print reserved images)

Procedure to print all the images that are set to print.

---

- 1 Make the print settings (page 88), and complete the printing setup (page 119).

- 2 Select the DPOF icon , and press the SET button.
  - The Print Scheduled Images Screen appears.



- 3 Select "PRINT", and press the SET button.
  - Printing begins.
  - Printing begins about 1 minute after the SET button is pressed.


---

#### HINT

- In step 2, if you press the [◀] or [▶] button, you can confirm the images that are set to print and their DPOF settings.

---

#### CAUTION

- Reserved images printing  is not possible if a printer is used that does not support your camera's DPOF function.



## To change the printer settings and print images (change printer settings)

Images are printed according to settings specified by the camera, such as paper type, size, layout, printing quality, etc.

### 1 Complete the printing setup (page 119).

### 2 Select the printer settings icon , and press the SET button.

- The Printer Settings Screen appears.

**MEDIA TYPE:**

Specify the type of paper used for printing.

**PAPER SIZE:**

Specify the size of paper used for printing.

**LAYOUT:**

Specify how the images are to be arranged on the paper.

**QUALITY:**

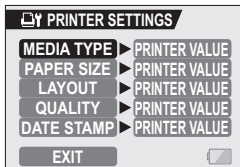
Select the print quality for the images.

**DATE STAMP:**

Print the date the photo was taken.

**EXIT:**

Return to the PictBridge Screen.





---

## DIRECT PRINTING

---

### 3 Adjust the printer settings.

- ① Press the [▲] or [▼] button to select a printer setting parameter, and press the SET button.
  - The screen to set the selected parameter appears.
- ② Press the [▲] or [▼] button to adjust the setting, and press the SET button.
  - The selected parameter is set, and you are returned to the Printer Settings Screen.
  - Follow the same procedure to adjust the other parameters, as desired.
  - The contents of the settings that can be made for each parameter will differ depending on the printer.

**<When "PRINTER VALUE" is selected>**

- The images will be printed according to the settings specified on the printer side.

---

### 4 Select "EXIT", and press the SET button.

- You are returned to the Printing Mode Screen.

---


#### HINT

- The printer setting parameters will differ depending on the printer that is connected.
- To use printer functions which do not appear on your camera's Printer Settings Screen, select "PRINTER VALUE".
- If a function set by the camera is not available in the printer, the camera's printer settings will automatically change to "PRINTER VALUE".



# COMMONLY ASKED QUESTIONS

If you have a question about the camera operation, you might find the answer in this compilation of commonly asked questions.



	Question	Answer	Action
Power	Why doesn't the power turn on?	Due to cold temperatures, the batteries temporarily lost their power.	Place the camera in your pocket to warm it up before using it.
	Why are the batteries consumed so quickly?	The ambient temperature is very low.	Keep the batteries in an environment of 10 to 40°C (50 to 104°F).
		The battery life has expired.	Replace with new batteries.
	Why does the  icon appear?	The remaining battery power is low.	Use the separately sold AC adaptor, or replace the batteries with new ones.
Shooting	Why doesn't the touch sensor work?	You are wearing gloves.	Remove the glove from the hand pressing the shutter button.
	Why does the access light flash?	Recorded data is being saved on the card or to the camera's internal memory.	Not a malfunction. Wait until the access light turns off.
	Why doesn't the flash operate?	The camera has determined that the image is bright enough and the flash is not necessary.	Not a malfunction. Capture the image; the camera will determine when the flash is necessary.



## COMMONLY ASKED QUESTIONS

	Question	Answer	Action
Shooting	Are the settings retained even after the camera is turned off?	—	All settings except the self-timer and the exposure correction are retained even after the camera is turned off.
	Which resolution setting should I use?	—	Select the resolution setting according to the intended use: <b>10M 6M-H 6M-S 4M</b> : Appropriate for printing letter-size or larger, and for printing a close-up of part of a photo (trimming). <b>2M</b> : For printing standard photo (photo service) sizes. <b>0.3M</b> : For photos displayed on a web page, or sent as e-mail attachments.
	What is the difference between the digital zoom and the optical zoom?	—	Because shooting with the optical zoom uses the optics of a physical lens, you can shoot without losing minute details in the image. The digital zoom, on the other hand, works by magnifying a portion of the image that hits the CCD sensor and may produce a coarser image.



	Question	Answer	Action
Shooting	How can I get the distant view into focus?	—	Set the scene select function to the landscape  mode when photographing. Or, set the focus range setting to manual focus [MF], and set the distance to ∞.
	The video clip I shot outdoors is completely white.	—	Set the flicker-reduction setting to off  .
LCD monitor	When used in cold weather, why does the image seem to leave traces as it moves?	Condition due to the liquid crystals.	Not a malfunction. Spots that appear in the LCD monitor only appear in the monitor and will not be recorded with the images.
	Why does the displayed image contain some red, blue and green dots, or why are black spots visible?		



## COMMONLY ASKED QUESTIONS

	Question	Answer	Action
<b>Viewing images</b>	Why is the image too bright?	The subject was too bright.	When capturing an image, devise a way to compensate for a bright subject, for example, by changing the shooting angle.
	Why is the image out of focus?	The focus is not locked properly.	Hold the camera correctly, and when the image is locked in focus, gently press the shutter button all the way to capture the image.
	Why doesn't the zoom jump playback work?	Zoom jump playback does not work for an image that was created from a magnified portion of a zoom jump image, or for video clips.	Not a malfunction.
	Why is there no image (□ is shown)?	This may happen when trying to play back images stored on a card from a different digital camera.	Play back images that were recorded on a card using this camera.
	Why do vertical stripes appear?	If a bright subject is shot in the video clip recording mode, vertical stripes may appear on the LCD monitor or in the image.	Not a malfunction.



	Question	Answer	Action
<b>Viewing images</b>	Why isn't the magnified image clear?	Due to the characteristics of the camera, magnified images appear less clear.	Not a malfunction.
	Why isn't the captured image clear?	The image was captured using the digital zoom.	Not a malfunction. Zoom in only within the optical zoom range when shooting.
	Can I play back image data that I edited using my computer?	—	We cannot guarantee the accurate playback of data that has been edited using a computer.
<b>Printing</b>	Why does a message appear during PictBridge printing?	There is a problem with the printer.	Please refer to the instruction manual for your printer.
<b>Misc.</b>	Why does the "CARD FULL" or "INTERNAL MEMORY FULL" message appear?	There is no more available memory on the card or in the camera's internal memory.	Erase unnecessary data, or use a card that has more memory available.
	Why does the "CARD IS PROTECTED" message appear?	The lock switch on the card is in the locked (protect) position.	Move the lock switch to the unlocked position.
	Why can't the camera be operated?	A temporary internal circuitry problem may be the cause.	Remove the AC adaptor and batteries from the camera, wait a few minutes, then reinstall the batteries and try again.



## COMMONLY ASKED QUESTIONS

	Question	Answer	Action
<b>Misc.</b>	Can I use my camera abroad?	—	If you have questions about using the AC adaptor and power cord abroad, please consult with a dealer near you for advice.
	Why does the "SYSTEM ERROR" message appear?	A problem has occurred within the camera or card.	<p>Check the following items:</p> <ul style="list-style-type: none"> <li>① Remove the card and then install it again.</li> <li>② Remove the batteries and then install them again.</li> <li>③ Install a different card.</li> </ul> <p>If "SYSTEM ERROR" still appears after performing the above steps, then take the camera to the dealer for service.</p>



# TROUBLESHOOTING

Before taking your camera to the repair shop, check the following table for a possible solution to the problem.

## CAMERA

	Problem	Cause	Action	Reference page
Power	No power.	The batteries are dead.	Insert new batteries.	15
		The battery has not been inserted correctly.	Reinsert the battery, making sure to orient it correctly.	
		The battery/card cover is not completely closed.	Close the battery/card cover completely.	
	The camera turns off by itself.	The power save function is operating.	Press the ON/OFF button, shutter button, playback button, MENU button or SET button to turn the camera on again.	18
Shooting	An image is not captured when the shutter button is pressed.	The power is not turned on.	If the power save function was activated, turn the camera on before shooting. If the camera was turned off, press the ON/OFF button to turn it on.	18



## TROUBLESHOOTING

	Problem	Cause	Action	Reference page
Shooting	An image is not captured when the shutter button is pressed.	The maximum number of images that can be captured or the maximum video clip recording time has been reached.	Install a new card.	14
			Erase the images that are not necessary. Save the images to separate media, then erase all the images from the card.	80
	The operation buttons (arrow buttons, MENU button, etc.) do not work.	A finger is touching the shutter button, and the focus lock is active.	Remove your finger from the shutter button, and then use the operation buttons.	—
	The flash does not operate.	The flash off mode is selected.	Set the flash to automatic flash mode or forced flash mode.	37
		The batteries are dead.	Insert new batteries.	15
	The digital zoom does not work.	The still image mode is set to <b>10M</b> . The digital zoom setting is set to "OFF".	Set the still image mode resolution setting to <b>6M-H</b> , <b>6M-S</b> or lower. Set the digital zoom setting to "ON".	58, 105
	A warning tone (beep-beep-beep) sounds, and it is not possible to take a picture using the self-timer.	The batteries are consumed.	Insert new batteries.	15



	Problem	Cause	Action	Reference page
<b>Shooting</b>	When zooming in or out, the zoom movement stops momentarily.	The optical zoom has moved to the maximum magnification position.	Not a malfunction. Release the zoom switch, and press it again.	36
	There is noise in the captured image.	The ISO sensitivity setting is too high.	Set the ISO sensitivity to a lower setting.	70
<b>LCD monitor</b>	No playback image appears.	The playback mode is not active.	Press the playback button [▶].	29
<b>Viewing images</b>	The image is too dark.	The flash was blocked by a finger or other object.	Hold the camera correctly, and make sure the flash is not obstructed.	22
		The subject was too far away.	Capture the image in the range of operation of the flash.	144
		The subject was lit from behind.	Use the forced flash mode.	37
			Use the exposure correction function.	39
		There is not enough light.	Adjust the ISO sensitivity setting.	70



## TROUBLESHOOTING

	Problem	Cause	Action	Reference page
Viewing images	The video clip picture is flickering.	The video clip was recorded under fluorescent lighting.	Set the flicker-reduction setting to on.	73
	The image is too bright.	The forced flash mode is selected.	Select a different flash mode.	37
		The subject was too bright.	Use the exposure correction function.	39
		The ISO sensitivity setting is incorrect.	Set the ISO sensitivity to <b>[ISO-A]</b> .	70
	The image is not in focus.	The subject is too close to the camera.	Select the correct focus setting for your needs.	27, 59, 68
		The focus setting is not correct.		
		The camera moved when the shutter button was pressed.	Hold the camera correctly and press the shutter button correctly.	22, 27
		The focus is not locked properly.		
		The lens is dirty.	Clean the lens.	—














	<b>Problem</b>	<b>Cause</b>	<b>Action</b>	<b>Reference page</b>
<b>Viewing images</b>	The colors of the images captured indoors are not correct.	This is due to ambient lighting.	Capture the image using the forced flash mode.	37
		The white balance setting is incorrect.	Set the white balance setting correctly.	71
	A part of the image is missing.	The handstrap or a finger was blocking the lens or lens opening.	Hold the camera correctly, and make sure the lens is not obstructed.	22
	"NO IMAGE" is shown.	There is no image stored in the installed card or the internal memory.	Play back after capturing images.	27, 32
<b>Image editing</b>	You cannot edit or rotate an image.	The protect mode is set.	Cancel the protect mode.	78
<b>Misc.</b>	The "PROTECTED" message appears and the data cannot be erased.	You have attempted to erase data that is protected from accidental erasure.	Set the protect setting for the data to OFF.	78
	When a 1GB card is used, the recording capacity is less than that indicated in the section "Possible No. of Images/ Possible Shooting Time".	The recording capacity of the card is less than 1GB.	Depending on the card, the capacity may be less than 1GB. Please refer to the instructions that accompanied the card.	146



## TROUBLESHOOTING











### Notes regarding the scene select feature and filters

#### During still image shooting









	When using a filter, the  focus range setting is not available.
	The  and  focus range settings are not available.
	
	
	
	Focus range: Fixed at  . Flash: Fixed at  .



## During video clip recording

	When using a filter, the  focus range setting is not available.
	The  and  focus range settings are not available.
	
	
	
	
	The focus range is fixed at  .

## About the scene select function and focus range settings

- The scene select function changes to  when the focus range is set to .
- Even if you set the focus range to ,  or , it changes to  when the scene select function is set to  or .



# SPECIFICATIONS

## Camera


Type	CCD digital camera (recording and playback)
Recording system	Digital recording
Image file format	Still images: JPEG format (DCF, DPOF, Exif 2.2 compliant) Note: Designed mainly by the Japan Electronics and Information Technology Industries Association (JEITA), DCF (Design rules for camera file system) is standard for digital still camera image files to provide interoperability between digital photography devices for the images stored on removable memory cards. However, it is not guaranteed that all devices will support the DCF standard. Video clips: QuickTime Movie (Photo-JPEG) (Video only; audio is not recorded)
Data storage media	Internal memory: 15MB External memory: SD Memory Card, Multi Media Card
Camera effective number of pixels	Approx. 6 million pixels
Image sensor	1/2.5-inch CCD Virtual number of pixels: Approx. 6.37 million pixels, interlace scan, primary color filter



Recording resolution	<b>10M</b> : 3,680 × 2,760 pixels (single-shot still images only) <b>6M-H</b> : 2,816 × 2,112 pixels (single-shot still images and sequential shots only) <b>6M-S</b> : 2,816 × 2,112 pixels (single-shot still images and sequential shots only) <b>4M</b> : 2,288 × 1,712 pixels (single-shot still images and sequential shots only) <b>2M</b> : 1,600 × 1,200 pixels (single-shot still images and sequential shots only) <b>0.3M</b> : 640 × 480 pixels (single-shot still images and sequential shots only) <b>320</b> : 320 × 240 pixels, 15 frames/second (video clip recording only) <b>160</b> : 160 × 120 pixels, 15 frames/second (video clip recording only)	
White balance	Full-auto TTL, manual setting possible	
Lens	3.0× optical zoom lens	f=5.8 mm to 17.4 mm (35 mm film camera conversion f=35 mm to 105 mm) Autofocus, 5 groups, 6 elements (2 with aspheric surfaces), internal ND filter
Aperture	Open F=2.8 (Wide) to 4.9 (Tele) Alternative ND filter	
Exposure control type	Programmable AE Exposure correction available from the Shooting Setting Screen (0±1.8EV in 0.3EV steps)	
Light-measuring modes	Multi-section measuring, center-weighted measuring, spot measuring	



## SPECIFICATIONS

Range	Normal photography: 10 cm (3.94 in.) to ∞ (Wide), 40 cm (15.75 in.) to ∞ (Tele) Macro photography: 5 cm (1.97 in.) to 70 cm (27.56 in.) (Wide), 40 cm (15.75 in.) to 70 cm (27.56 in.) (Tele)
Digital zoom	For shooting: 1x to 4x (except resolution <b>10M</b> ) For playback: 1x to 57.5x (varies with resolution)
Shutter speed	Single-shot mode: 1/2 to 1/1,500 sec. (Maximum approx. 2 seconds when the scene select function is set to fireworks  etc.) (During flash: 1/30 to 1/1,500 sec.) Sequential shots shooting mode: 1/2 to 1/1,500 sec. Video clip recording mode: 1/30 to 1/10,000 sec.
Sensitivity	Single-shot mode/sequential shots shooting mode: Auto (equivalent to ISO50 to 200)/equivalent to ISO50, ISO100, ISO200, and ISO400 (switchable from Shooting Setting Screen) Video clip recording mode: Auto (equivalent to ISO100 to 400)/equivalent to ISO100, ISO200, ISO400, and ISO800 (switchable from Shooting Setting Screen)
LCD monitor	2.0-inch TFT color LCD Approx. 86,000 pixels (Frame coverage: Approx. 100%) 7-step brightness adjustment



Flash working range		GN = 6.5 Approx. 10 cm (3.94 in.) to 3.2 m (10.50 ft.) (Wide) Approx. 40 cm (15.75 in.) to 1.8 m (5.91 ft.) (Tele)
Flash modes		Auto-flash, forced flash, flash off, red-eye reduction
Focus		TTL-type AF (9-point range finder/spot focus), manual focus (14 steps)
Self-timer		Approx. 2-second delay, 10-second delay (including interval shooting)
Time/date		Recorded with image data
Ambient environment	Temperature	0 to 40°C (32 to 104°F) (operation), -20 to 60°C (-4 to 140°F) (storage)
	Humidity	30 to 90% (operating, no condensation) 10 to 90% (storage, no condensation)
Power supply	Batteries	AA-size alkaline batteries × 2 The following batteries can also be used: AA-size Ni-Cd batteries (SANYO N-3UV) × 2 AA-size nickel metal hydride batteries (SANYO HR-3UF) × 2 * AA-size manganese batteries cannot be used.
	AC adaptor (sold separately)	model VAR-G4AEX for Europe, U.K. and others, and model VAR-G4AU for North America and others
Dimensions (not including protuberances, depth at narrowest dimension)		93.1(W) × 60.5(H) × 27.1(D) mm 3.67" (W) × 2.38" (H) × 1.07" (D)
Weight		Approx. 124 g (4.37 oz.) (without batteries and card)



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## SPECIFICATIONS

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### Camera Connector

USB/AV (communication/sound and image output) terminal	USB 2.0 (High-speed)
DC IN (external DC power input) terminal	DC 3.4 V (for exclusive use with the separately sold AC adaptor (model VAR-G4AEX for Europe, U.K. and others, and model VAR- G4AU for North America and others))

### Battery life

	Alkaline batteries (supplied)	Nickel metal hydride batteries sold separately: HR-3UF)
Possible No. of Images*	120 images	360 images
Maximum playback time**	380 min.	530 min.

\* According to the CIPA standard (when using a Matsushita Electric Industrial Co., Ltd. 64MB SD Memory Card).

\*\* With continuous playback when using the LCD monitor.

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### NOTE

- Approximate time until batteries run out, based on test conditions at room temperature (25°C [77°F]).
- The battery operation time may vary depending on the conditions of the batteries and the conditions of use. Especially when used at temperatures below 10°C (50°F), the battery operation time is drastically reduced.



## Possible No. of Images/Possible Shooting Time

The table shows the possible number of captured images and the possible recording time for the camera's internal memory (15MB) and for the commercially available 128MB and 1GB SD Memory Cards.

Shooting mode setting	Resolution setting	Internal memory	SD Memory Card	
			128 MB	1 GB
Single-shot mode/ Sequential shots mode	10M <sup>*1</sup>	4 images	37 images	290 images
	6M-H	5 images	42 images	330 images
	6M-S	7 images	64 images	495 images
	4M	11 images	96 images	746 images
	2M	22 images	191 images	1,470 images
Video clip mode	0.3M	116 images	979 images	7,550 images
	320	1 min. 30 sec.	12 min. 39 sec.	1 hr. 37 min.
	160	2 min. 45 sec.	23 min. 11 sec.	2 hr. 59 min.

- Even with cards of the same capacity, the amount of data that can actually be stored may differ depending on the card brand, etc.
- The continuous shooting time will differ depending, for example, on the card type, capacity, performance, etc.

<sup>\*1</sup>: Available only for single-shot still image shooting.

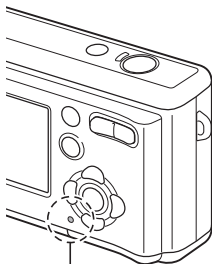


## SPECIFICATIONS

### Concerning the access light

The camera's access light will light, flash, or be off, depending on the different camera operations.

Access light status		Camera status
Off	—	Power OFF
Lit	—	Connected to a computer or printer
Flashing	Slow	Power save mode (sleep)
	Fast	Error or when error is displayed; warning
	Very fast	Accessing card or internal memory



Access light



## Others

Apple, Macintosh and QuickTime are trademarks or registered trademarks of Apple Computer Inc.

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### CAUTION

- It is forbidden to copy this manual, whole or in part, without prior written permission.
- All images and illustrations given in this manual are for explanation purposes and may differ slightly from that of the actual product. Also, actual specifications are subject to change without prior notice and therefore may differ from the contents of this manual.
- Sanyo Electric shall not be held responsible for any problems resulting from the use of this camera.
- Sanyo Electric declines all responsibility for damages due to improper use of the camera, failure to adhere to the instructions given in this manual, or repairs or changes done by those other than a technician authorized by the manufacturer.
- Sanyo Electric shall not be held responsible for any damage caused by optional devices or consumable items used with the camera other than those supplied with the camera or those specified by Sanyo Electric.
- Sanyo Electric shall not be held responsible for any losses or loss of revenue resulting from the loss of data caused by the malfunction, or the repairing of a malfunction, of the camera.
- The images captured with this camera will differ in quality from pictures taken with a standard film camera.



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# HINTS FOR TAKING PICTURES

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Taking great pictures in difficult surroundings is easier than you might think. By keeping a few points in mind and choosing the correct settings, you can create photos that you'll be proud to display and share.

## If images are blurred even when the autofocus is used

Your camera employs an autofocus function. When you snap a picture using the autofocus, the camera automatically adjusts the settings so that the image will be in focus. If you are getting blurred images even when using the autofocus, one or more of the following might be the reason.

### ■ How the autofocus works

The autofocus is activated when the shutter button is lightly touched. Press the shutter button slightly, and the target mark will appear on the LCD monitor to indicate that the autofocus has been activated. Next, continue to gently press the shutter button all the way to snap the picture. This two-step method is the way to ensure that your photos are perfectly focused.

### ■ Reasons for unfocused images

- ① The shutter button was pressed before the image was focused.
- ② After the image was focused, the subject moved.
  - Even if camera focuses the subject once, if the distance between the camera and the subject is changed, the subject may become out of focus.
- ③ The focus setting is not set for the correct distance.
  - If you shoot a close-up subject with the camera set to the normal focus mode, or if you shoot a subject at normal distance with the camera set to the macro (close-up) mode, the image will not be in focus.



### ■ Preventing blurred images

- ① Confirm that the camera is set to the correct focus mode for your subject.
- ② Hold the camera correctly, and lightly touch the shutter button.
- ③ Wait for the target mark to appear in the LCD monitor, and holding the camera steady, gently continue to press the shutter button all the way down.

Following these steps for a gentle but firm pressing of the shutter button will ensure that you get beautifully focused photos.

### ■ When the correct exposure setting is in doubt

When taking pictures with the light coming from behind the subject or through a window, it is usually necessary to adjust the exposure setting before shooting. Not only may it be difficult to determine the ideal exposure setting, but in addition, having to correct the exposure for each and every shot can be a bother. This is where the "auto bracket shots" function can prove to be a great convenience.

When the auto bracket shots mode is selected, one press of the shutter button captures a series of 7 successive images (or 5 images if the resolution is set to  or ) as the exposure automatically changes. Later you can view all the images in the bracket series to decide which one has the best exposure, and select one image to save.



## Photographing a moving subject

**Situation:** You would like to snap an action shot of a moving child or pet. The autofocus is activated, but because the subject is moving, the image may be blurred. In particular, when the distance between the camera and the subject is changing, it is difficult to lock the focus on the subject. Here are some hints for successfully capturing images of moving subjects.

### ■ Reasons for unfocused images

When the shutter button is touched lightly, the camera's autofocus works by determining the distance between the camera and the subject. Once the subject is in focus, if it then moves before the picture is snapped, the image may be out of focus. This often happens when you once lock the focus on a subject and then wait for the right moment to snap the picture. And, conversely, a blurred image may result if you press the shutter button all the way in one step in an attempt to quickly capture an action scene, thus failing to activate the autofocus in time.

### ■ Preventing blurred images (How to use the manual focus [page 60])

In addition to the autofocus, a manual focus mode is also incorporated in your camera. In the autofocus mode, the distance between the camera and the subject is automatically determined when you press the shutter button halfway. In contrast to this, with the manual focus mode, you manually set the focus by specifying the correct distance between the camera and the subject before taking the picture.

### ■ How to photograph a moving subject

- ① Set the camera's focus mode to the manual focus. Set the focus distance to the correct distance between the camera and the subject.
- ② When the subject is at the set focus distance, gently press the shutter button all the way down.

#### <Advantage of using the manual focus>

- Images can be quickly captured without waiting for the autofocus to activate.
- Because you are presetting the focus distance, the focus can be more accurate.

#### <Using the manual focus effectively>

- When photographing a moving subject, press the shutter button just before the subject reaches the focus distance, and the shutter will be released when the subject is at the correct distance.
- Use manual focus to avoid incorrectly focused images when there is an object between the camera and the subject you wish to focus on.



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## HINTS FOR TAKING PICTURES

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### Shooting portraits (portrait mode )

**Points:**

- Choose a background that doesn't detract from your subject.
- Move in close to your subject.
- Pay attention to lighting and how it affects your subject.

---

**NOTE**

- If the background is distracting, it will not show your subject to his best advantage. Move in closer to your subject or zoom in so that the background does not compete with the subject.
- In portrait photography your subject is clearly the central figure, so try techniques that allow the subject to stand out.
- If light is coming from behind your subject (backlit), his face will appear dark. You can get a better picture by using the flash, for example, or changing the exposure setting.

### Photographing moving subjects (sports mode )

**Points:**

- Match the camera's movement with that of the subject.
- Set the zoom to the Wide end (wide-angle).
- Don't be too hesitant to press the shutter button, or you'll miss the action.

---

**NOTE**

- Tips to not missing those great action shots: Make sure you're holding the camera correctly. Keep the subject in the lens at all times, moving the camera with him while waiting for the right shot. Move your whole body—not just your arms—with the camera while shooting.
- Blurred images are more likely when the zoom is set to the Tele end than the Wide end. Set the zoom as close as possible to the Wide end.
- Learn to press the shutter button quickly yet smoothly the instant your photo chance occurs.



## Night photography (night view mode )

### Points:

- Avoid camera shake.
- Increase the ISO sensitivity.

---

### NOTE

- Camera shutter speed during night photography is considerably slower, so there is a much greater chance that your photographed images will be blurry. Use a tripod whenever possible, or if a tripod is not available, you can lean against a wall or pillar to help stabilize the camera.
- You can photograph your subject with the night scene in the background by using the flash. Be careful not to shoot too close to the subject, however, or your subject's face will appear too bright.
- After the flash operates, keep the camera and the subjects motionless for about 2 seconds.

## Photographing scenery (landscape mode )

### Points:

- Shoot using a high resolution.
- For zoom photography, use the optical zoom.
- Pay attention to picture composition.

---

### NOTE

- When shooting with a wide-angle setting, or if you intend to enlarge the photo, the higher the resolution, the better.
- To zoom in on distant scenery, it's better to use the optical zoom. Using the digital zoom produces a coarser image. Hold the camera securely, keeping your elbows close to your body and making sure the camera is stable. Using a tripod or other means of stabilizing the camera will increase the likelihood of getting a clear photo.
- Don't forget to pay attention to picture composition; note perspective and be aware of how the placement of objects affects the scene.





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**SANYO Electric Co., Ltd.**